

HOW TO DRAW **MANGA**

Sketching Manga-Style

2 Logical Proportions



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HOW TO DRAW
MANGA
Sketching Manga-Style

Vol.2 Logical Proportions



"Composition involves first establishing what to draw." (Morita)

Composition has an aspect of constantly searching, specifically regarding what to draw and how to portray it. However, at the bottommost root of composition, the artist still decides for him or herself what to draw and how. The head-to-body ratio and figure proportioning develop from this most basic element.

Sketching as a composition technique that paves the pathway from the earliest stage of determining what to draw to the completion of the final drawing.



Table of Contents

Chapter 1:

From the Head-to-Body Ratio Sketching Desk5

Head-to-Body Distortion Marks the Origins of *Manga*.....6

Endearing Head-to-Body Ratios for *Chibi* Characters.....8

Attractive Head-to-Body Ratios9

From the Artwork Drafting Desk12

Drawing a Character in a Gym Suit:

1:2 Head-to-Body Ratio.....12

Drawing a 1:2.5 Head-to-Body Ratio Character

Wearing a Skirt16

Drawing a Brawny Character: 1:2.5

Head-to-Body Ratio.....20

Character Wearing a (School) Regulation Swimsuit:

1:3.5 Head-to-Body Ratio.....22

Drawing a Character Wearing a Sailor Suit: 1:4

Head-to-Body Ratio.....24

1:5 Head-to-Body Ratio Study Sketches.....26

Drawing a Character Wearing a Jersey Top and Jeans:

1:5 Head-to-Body Ratio.....27

Drawing a Character Wielding a Sword:

1:5 Head-to-Body Ratio.....30

Drawing a Character Running: 1:6 Head-to-Body Ratio 34

Practice: Transforming a 1:6 Head-to-Body Ratio

Character into a 1:2.5 Head-to-Body Ratio Character36

What Are Proportioning and Sketching?.....38

Three Key Phrases in Improving Sketching Skills43

Chapter 2:

The Basics of Proportioning.....47

The Head-to-Body Ratio and Proportioning48

Attractive Proportions: 1:8.5 to

1: 5 Head-to-Body Ratios48

Chibi Characters: 1:4 to 1:2 Head-to-Body Ratios..... 54

Chibi Character Proportioning as the Basis of

Head-to-Body Ratio Sketching.....60

What Is Meant by "*Chibi* Proportioning"?.....61

Drawing the Face: Sketching and Stylization.....64

Drawing the Full Figure: Sketching and Stylization.....66

Drawing the Clothes78

Da Vinci's Proportions.....90

Proportional Sketching from Low and High Angles.....92

Low Angle Compositions.....92

High Angle Compositions93

High and Low Angles94

Putting Low and High Angles to Practice.....96

Chapter 3:

Stylization for Use in *Manga*.....111

Three Elements in Portraying Motion112

Drawing Common Actions.....114

Manga Stylization to Portray Actions120

Five Common Stylized Postures120

Running: Five Postures121

Jumping: Five Postures.....123

Landing: Five Postures.....124

Stylizing Gestures126

Stylizing Emotions132

Exaggerating with Facial Shadows.....146

Using Facial Shadows to Enhance Emotions147

Chapter 4:

Character Design and Color Design151

Character Design as Role Assignment.....152

Designing a Family.....152

Role Assignment and Character Design156

Redesigning the Characters with *Chibi*-proportioning160

Putting Attractive Proportion Designs to Practice:

Artwork by Kazuaki Morita162

Coloration.....169

Coloring the Cover Illustration171

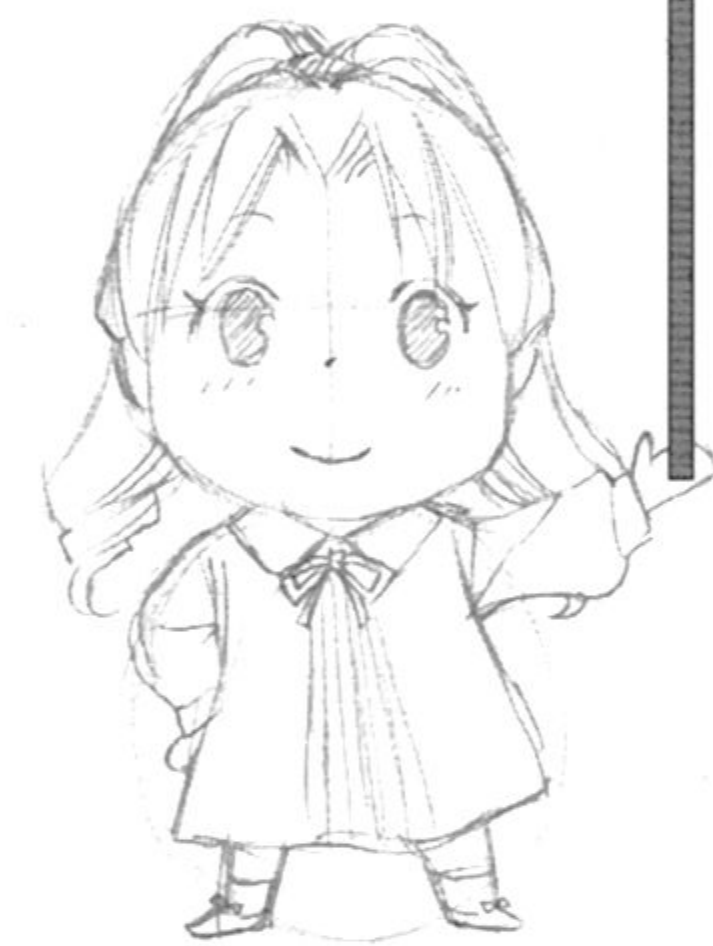
Putting Colored Pencils to Practice:

Artwork by Hiroko Shioda.....175

Sample Novelty Roles: Creature Girls.....180



From the Head-to-Body Ratio Sketching Desk



Designing the head-to-body ratios so that they allow the viewer to distinguish between the various characters allows the artist to work in a variety of genres as well as to design characters that suit the setting. *Manga* sketching lies at the foundation of this technique.

This chapter covers using *manga* sketching to design a character's head-to-body ratio.

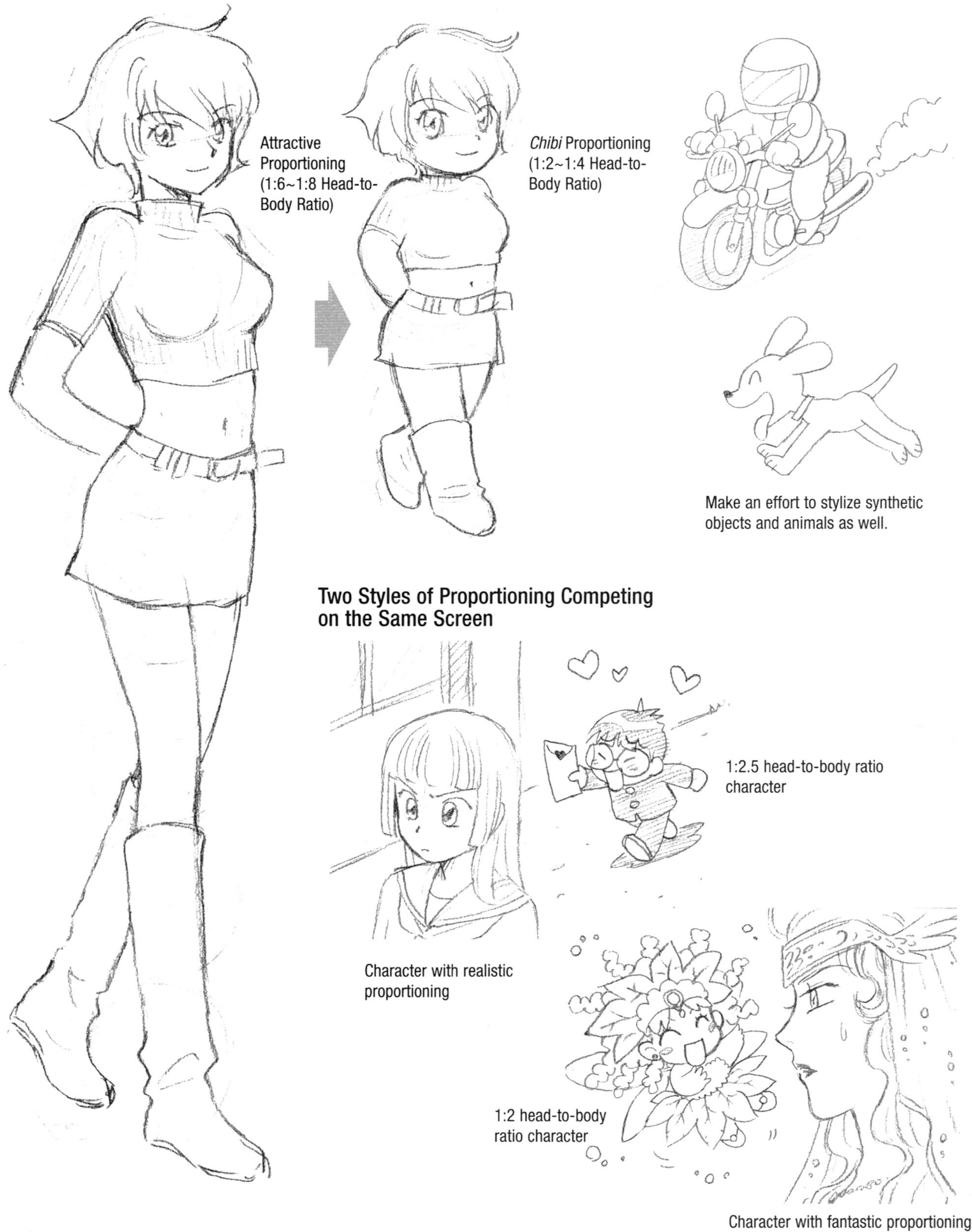
On that note, we ask *manga* artist Kazuaki Morita, who is currently active as both a first-rate character designer and artwork director, to step in and offer a little guidance.

Head-to-Body Distortion Marks the Origins of *Manga*

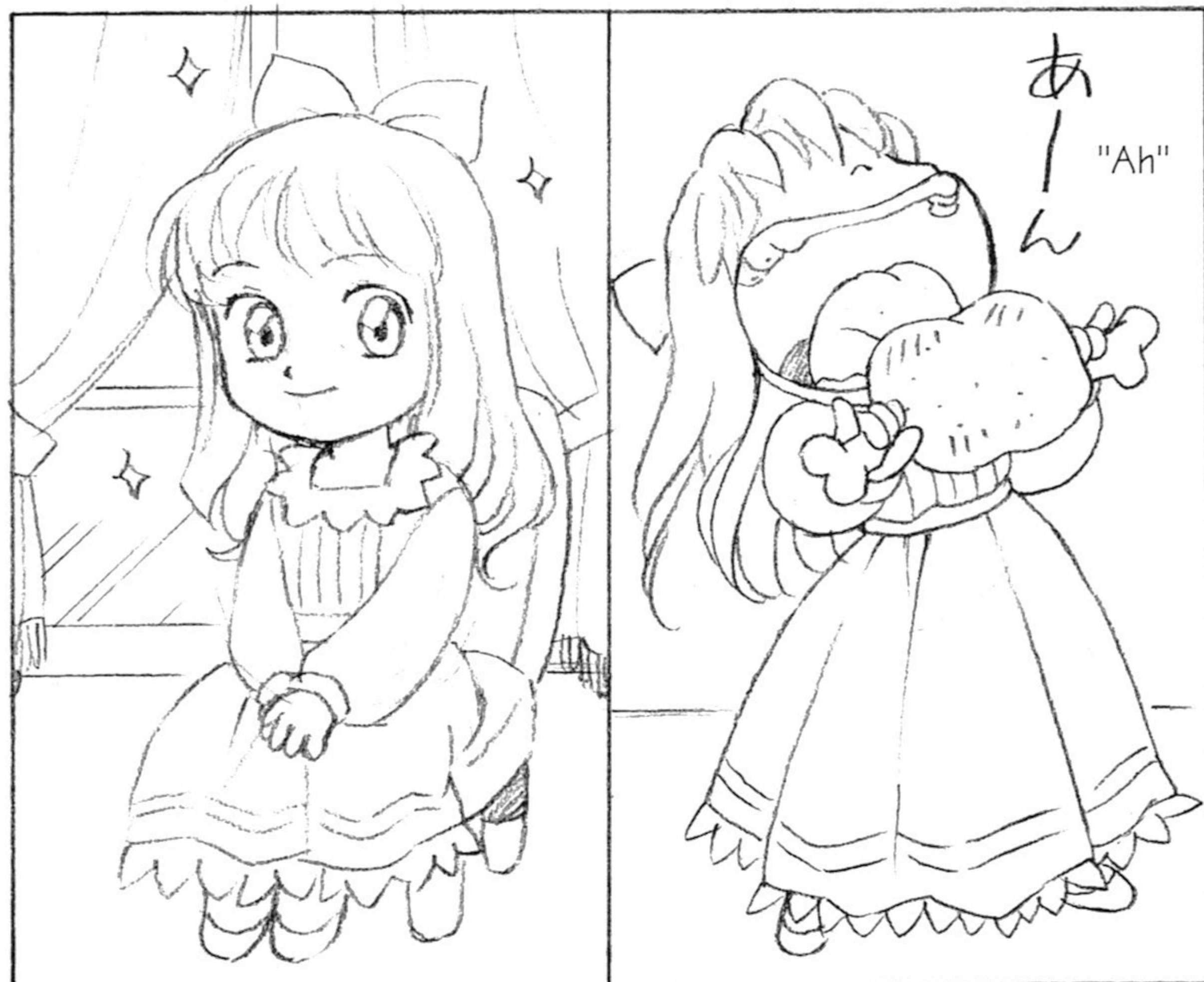
The head-to-body ratio constitutes the stylization of the character's figure proportions.

Manga is full of implausible things, movements, and thrilling scenes. The entertaining world within a given *manga* derives completely from stylized representations, including the characters' head-to-body ratios.

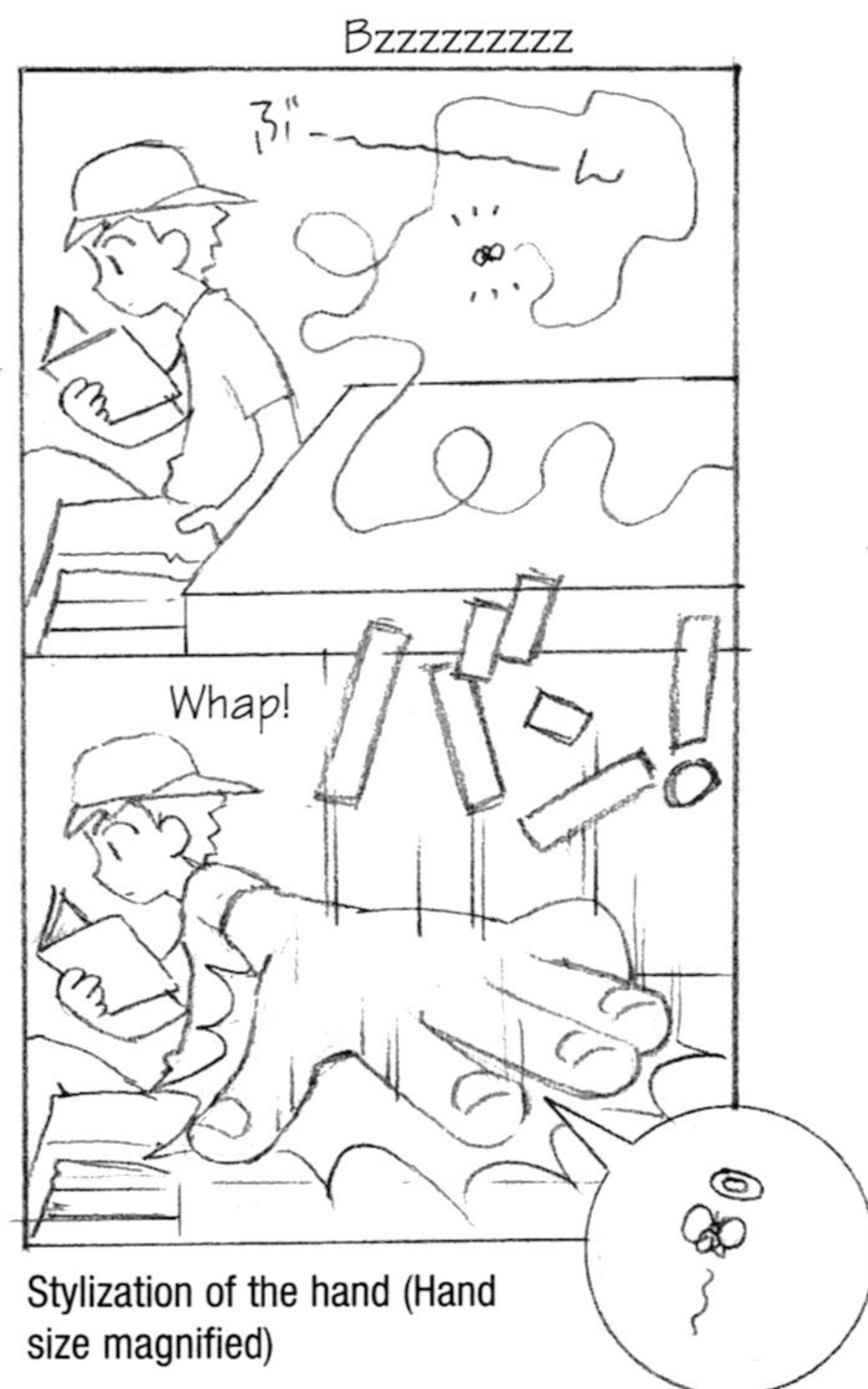
Ultra Stylization through Head-to-Body Ratio Modification



Assorted Representations Resulting from Stylization



Stylization of the head (Mouth shape modified and drawn at a colossal size)



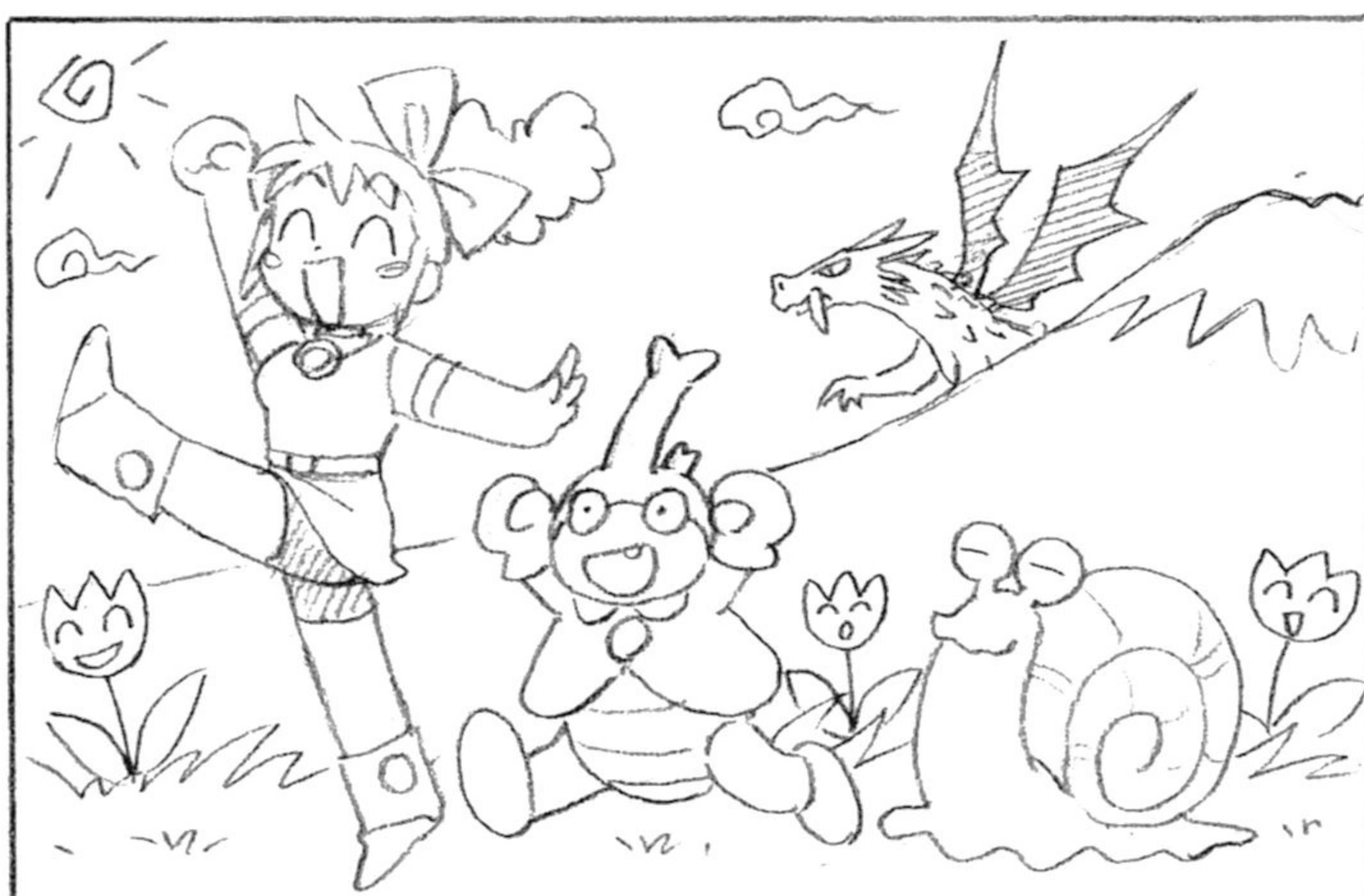
Stylization of the hand (Hand size magnified)



Anthropomorphized stylization



Stylization to portray movement



Stylization to portray a fantasy world or a fairytale world

Endearing Head-to-Body Ratios for *Chibi* Characters

The unusual proportioning defines *chibi* characters. The large face (head) gives *chibis* their distinctively childlike and adorable appearance.

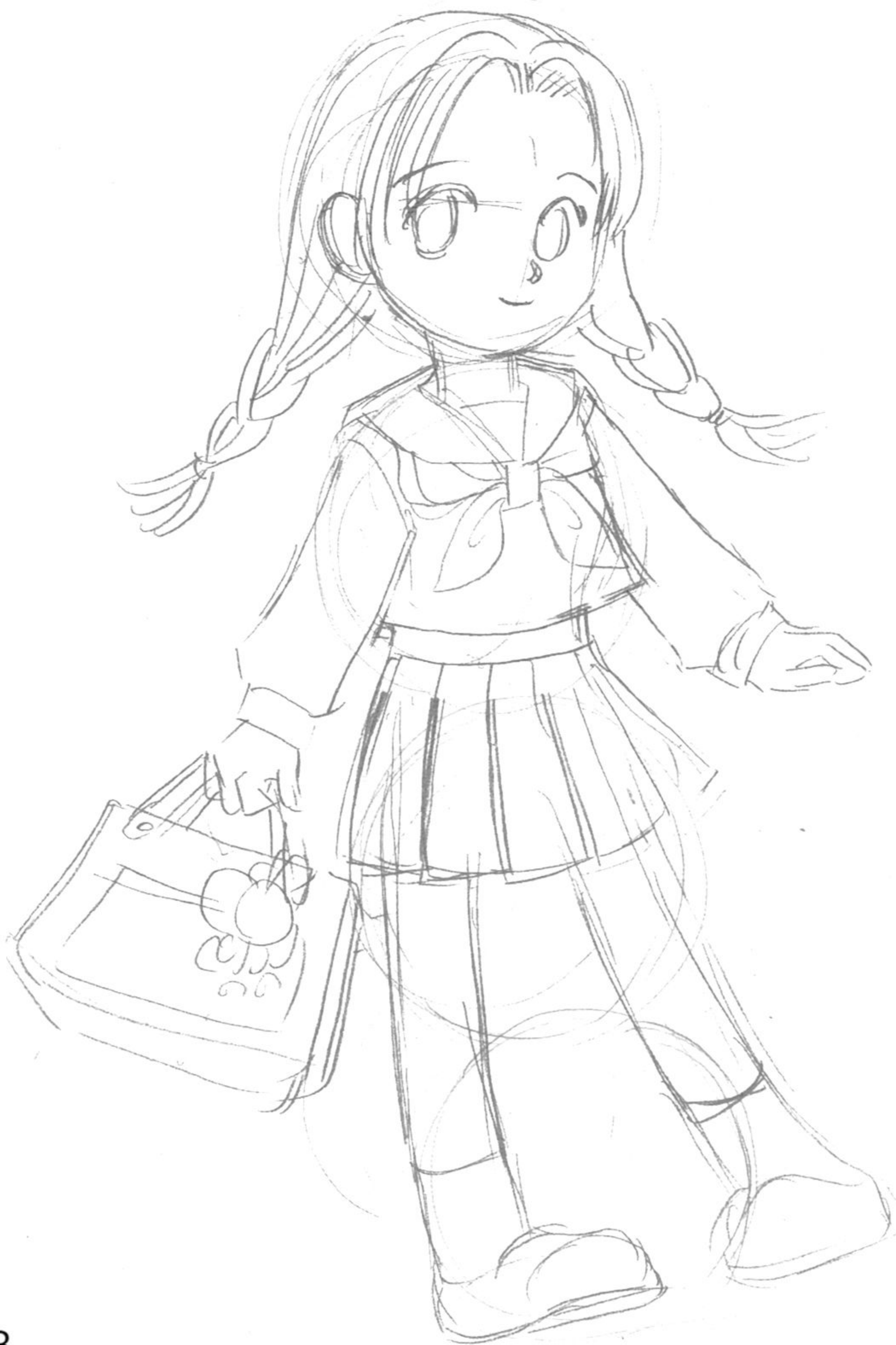
1:2 Head-to-Body Ratio

This proportioning is frequently used for characters in marketing to represent a product-line, characters in cutout frames, etc.



1:3 Head-to-Body Ratio

This proportioning, which makes movement portrayal easy, is frequently used for a wide rang of genres, from cutout frames and book and magazine illustrations to *manga*.



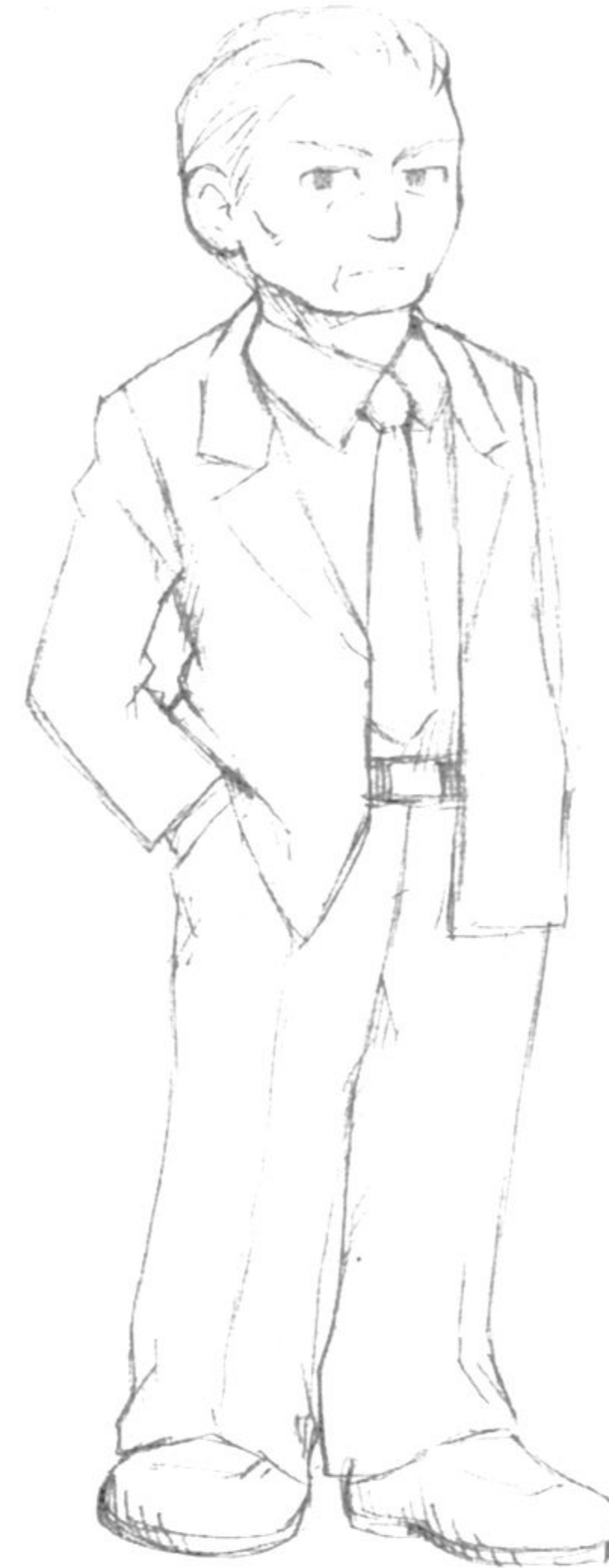
1:4 Head-to-Body Ratio

Commonly used for characters in *jido manga* (*manga* targeted to young children), this proportioning lends itself to elementary school and junior high school characters.

Attractive Head-to-Body Ratios

This proportioning reflects that seen in real-life and also appears on idealistically proportioned characters. It is commonly used with the protagonist in *manga* and *anime*.

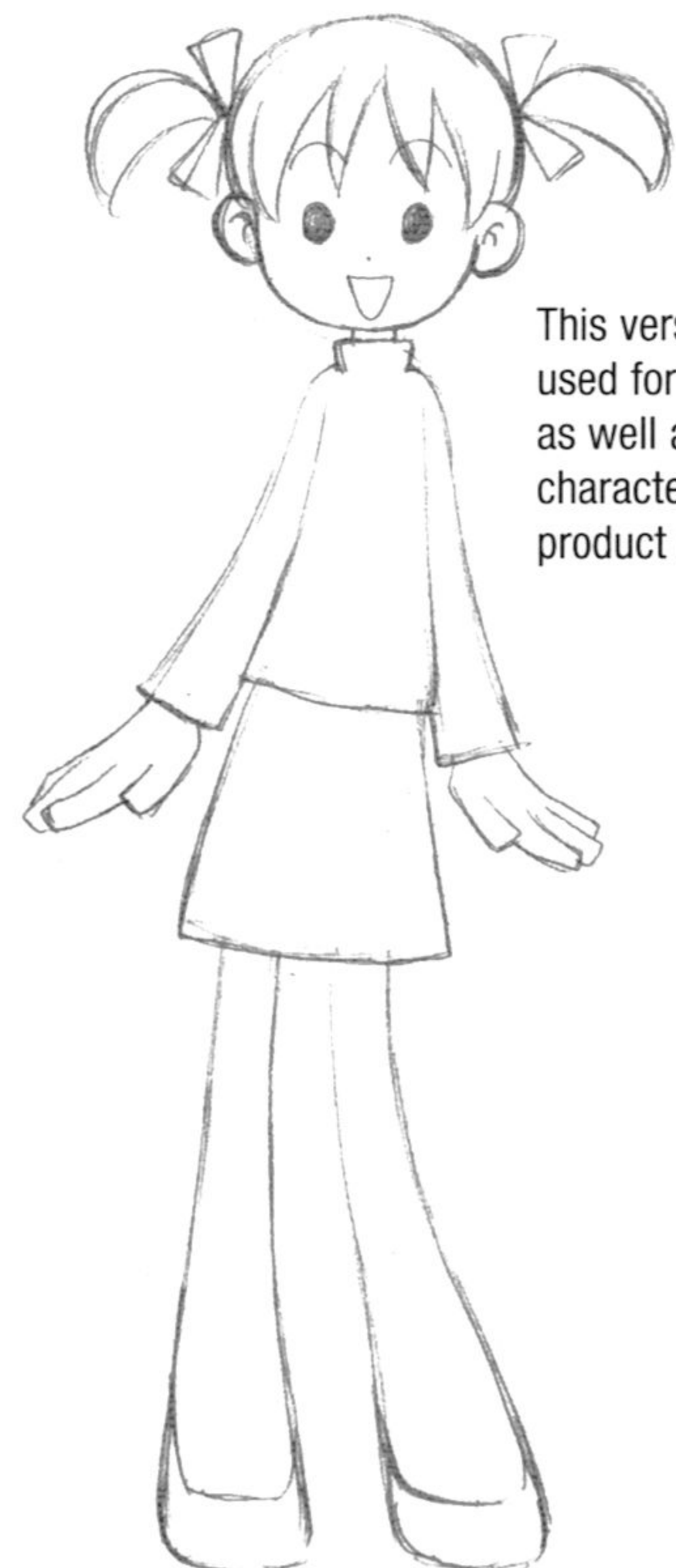
Jido manga and *shonen manga* (*manga* targeted at school-age boys) character design



1:5 Head-to-Body Ratio

This easy-to-draw head-to-body ratio affords the widest range of variation and frequently appears in *manga*. It should be noted, however, that this proportioning will make even adult characters appear childlike.

This stylized version of the 1:5 ratio is frequently used in illustrations and universally in *manga* character variations.



This version is used for illustration as well as with characters used in product marketing.

1:6 Head-to-Body Ratio

This proportioning creates the appearance of a 15 to 18-year old character.



1:7 Head-to-Body Ratio

This proportioning is suited to mature but still youthful characters somewhere between 17 years to their early twenties.



1:8 Head-to-Body Ratio

This is the proportioning used for adult characters.



Suited to book and magazine illustrations, the 1:8 head-to-body ratio lends itself to portraying dynamic movements, as the individual body parts are proportionally larger. When drawing a full figure in *manga*, the space available tends to be limited, requiring that the head be drawn on the small side. This means that the artist needs to use a little ingenuity in portraying the character.

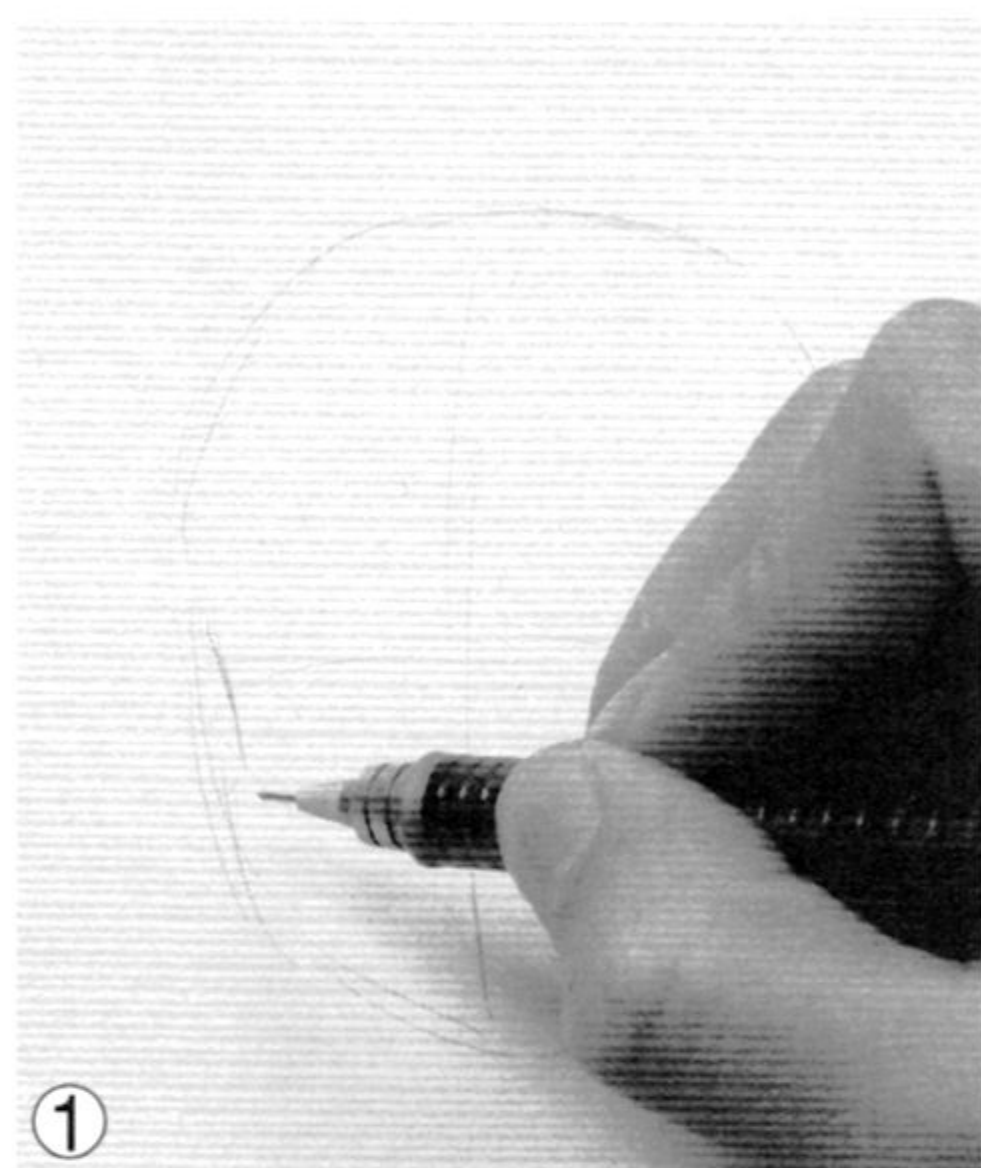


In *manga* panels, the heads of characters drawn at a 1:8 head-to-body ratio tend to end up too small. Consequently, artists opt for a 1:6 to 1:7 head-to-body ratio, so the facial expression is easier to see.

This section takes a look at an artist at his desk, designing *chibi* characters of various head-to-body ratios. The steps to composing are essentially the same for characters of all proportions.

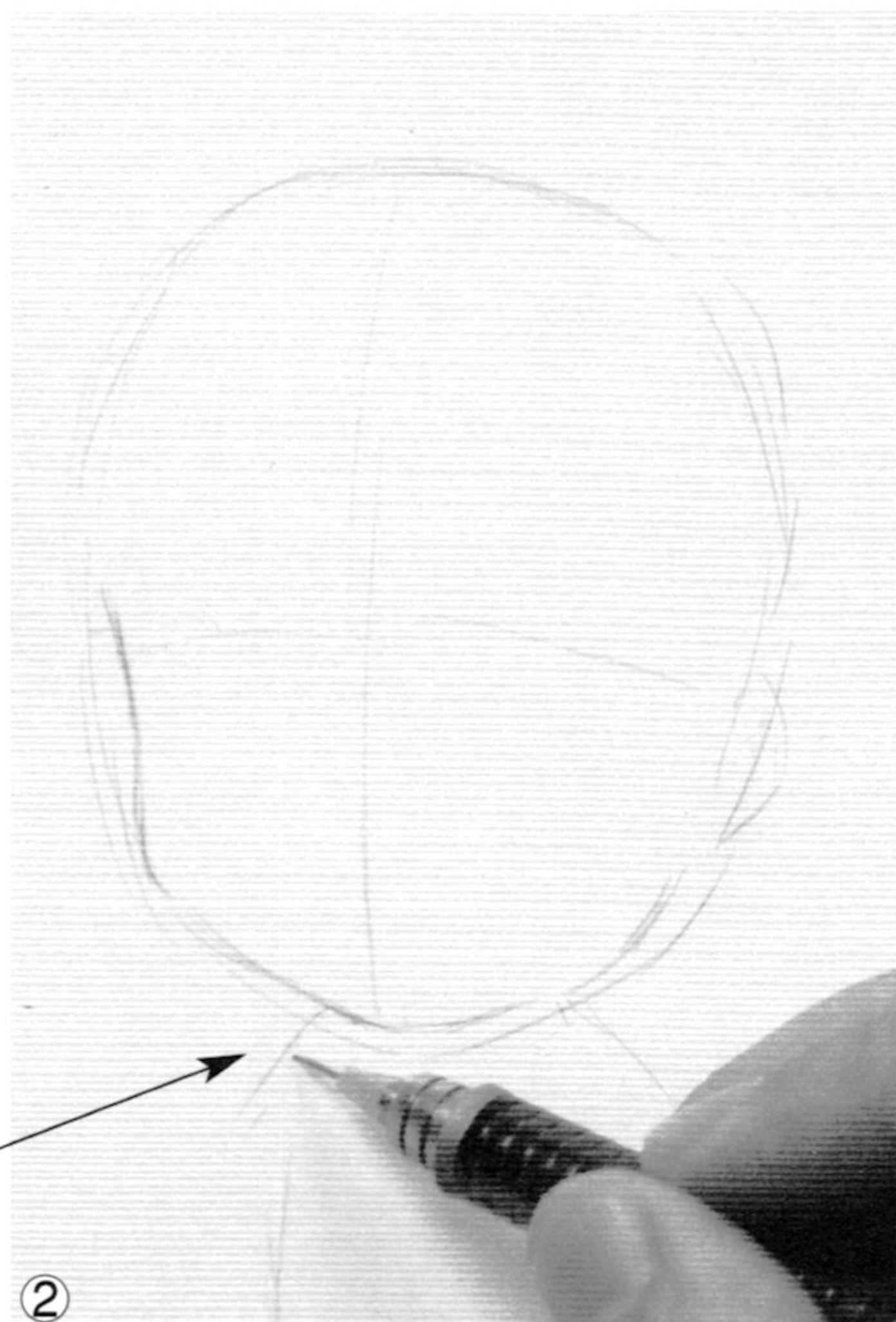
Drawing a Character in a Gym Suit: 1:2 Head-to-Body Ratio

1. Sketching a Circle-and-X Layout and the Neck (Shoulder Width)



The above shows Morita drawing a circle-and-X layout of the head. Always start with the most elemental step when sketching *manga* style.

Next, Morita determines the shoulders' width. This constitutes a key point in establishing the character's head-to-body ratio.



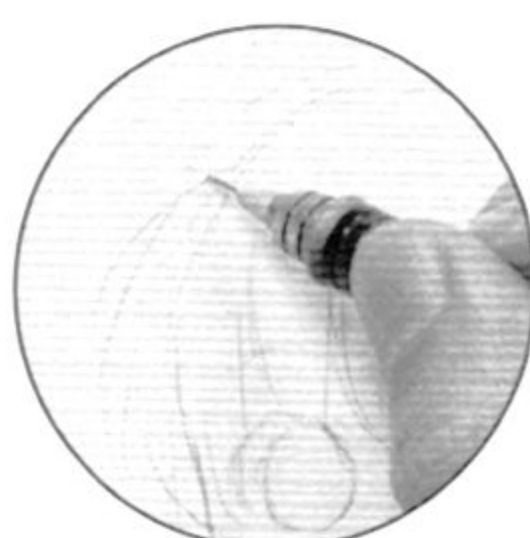
2. Sketching the Full Figure Layout and the Head Layout



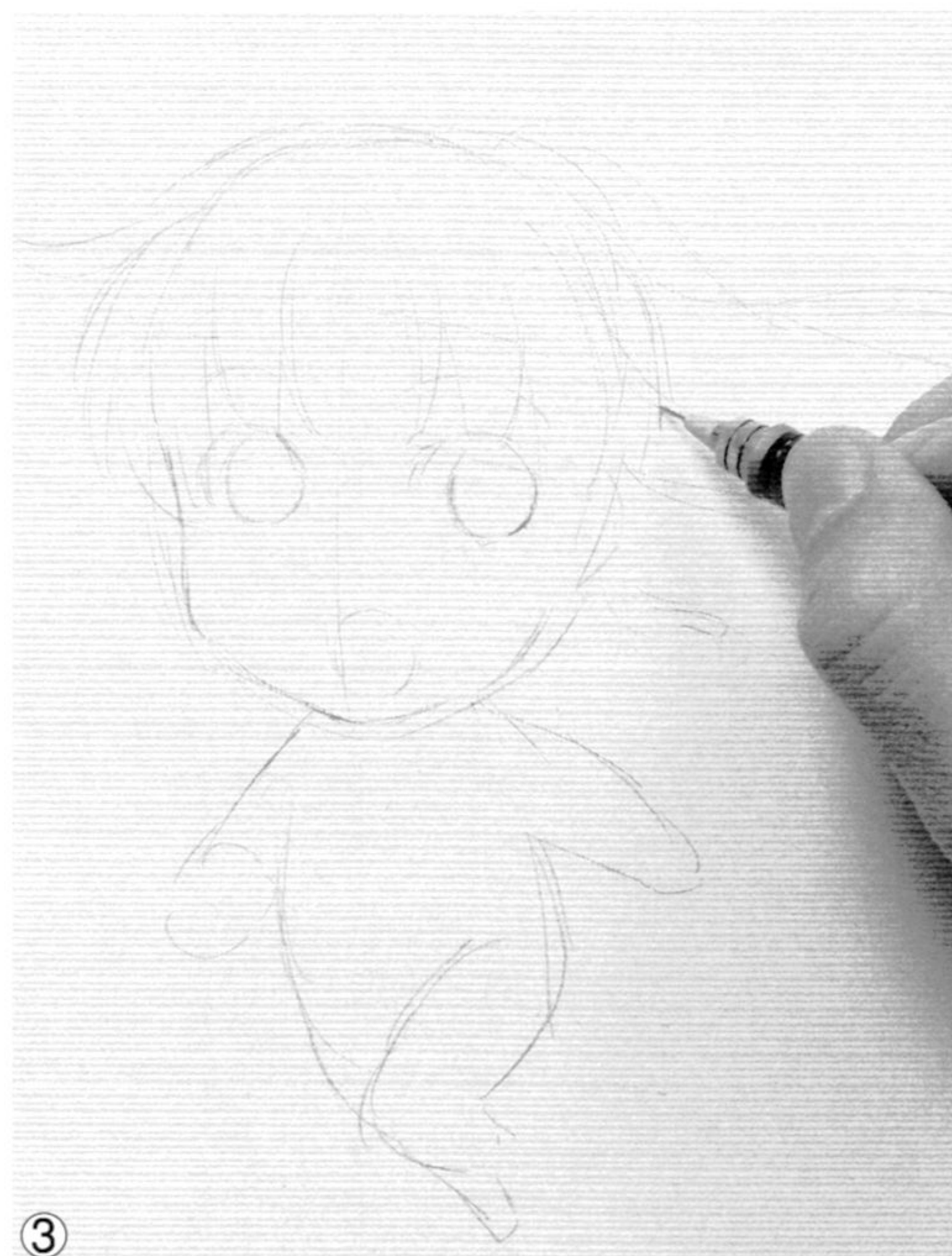
Use light strokes to sketch the posed figure's overall layout.



Headband layout



Morita adds the hair while adjusting the head's contours.

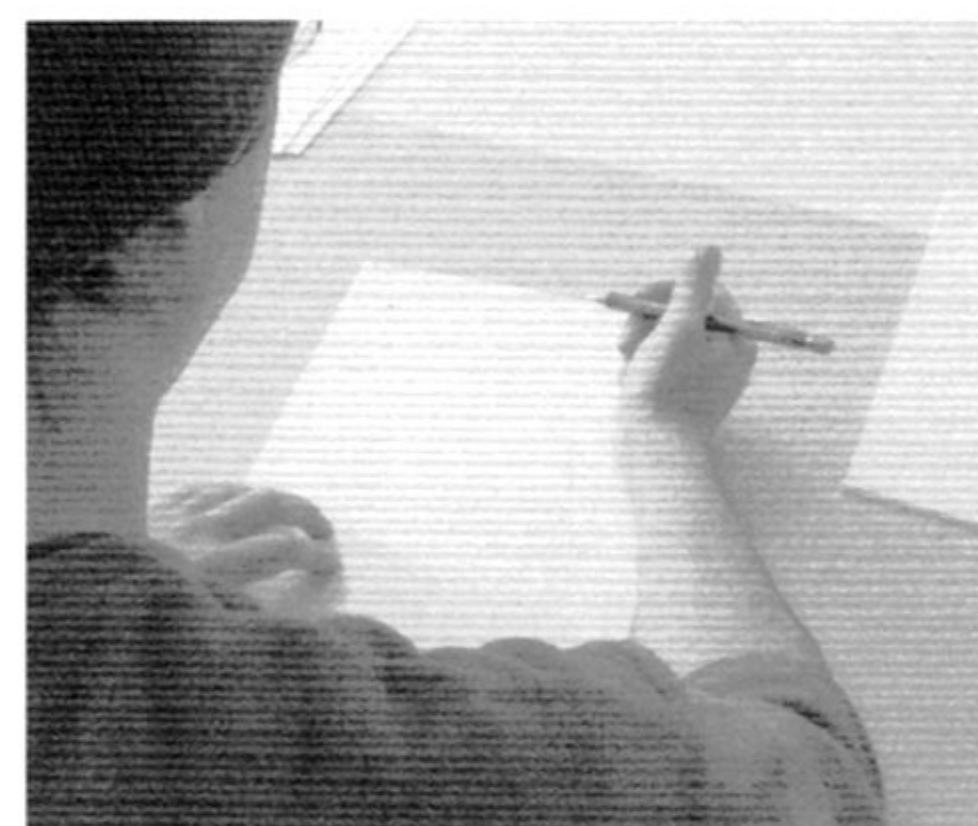


③

When sketching the face and head layouts, Morita adds faint strokes to suggest the facial expression and hair.

The Steps

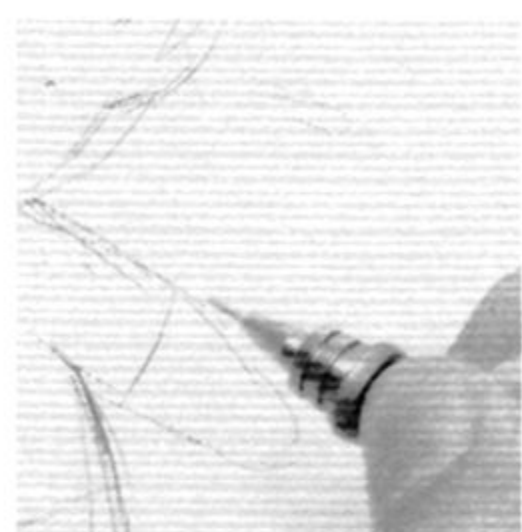
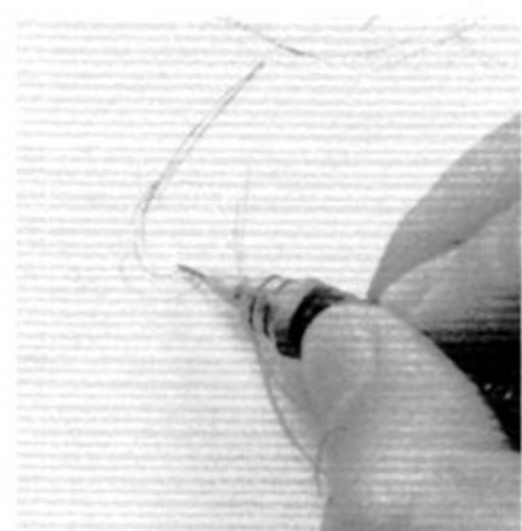
1. Sketch the head as a circle-and-X layout and determine the shoulder width.
2. Sketch the figure's exterior contours and roughly draw the face's contours.
3. Retrace the lines, adjusting and cleaning them up to complete the sketch.
 - 3-1. Adjust the body's contours.
 - 3-2. Adjust the face's and head's contours.
 - 3-3. Carefully clean up the overall figure.
 - 3-4. Add final touches to the face and detailed areas.



Begin drawing only after you have developed a clear image of the character in your mind. (I.e. decide first and then begin drawing.)

3. Retracing While Adjusting Contours

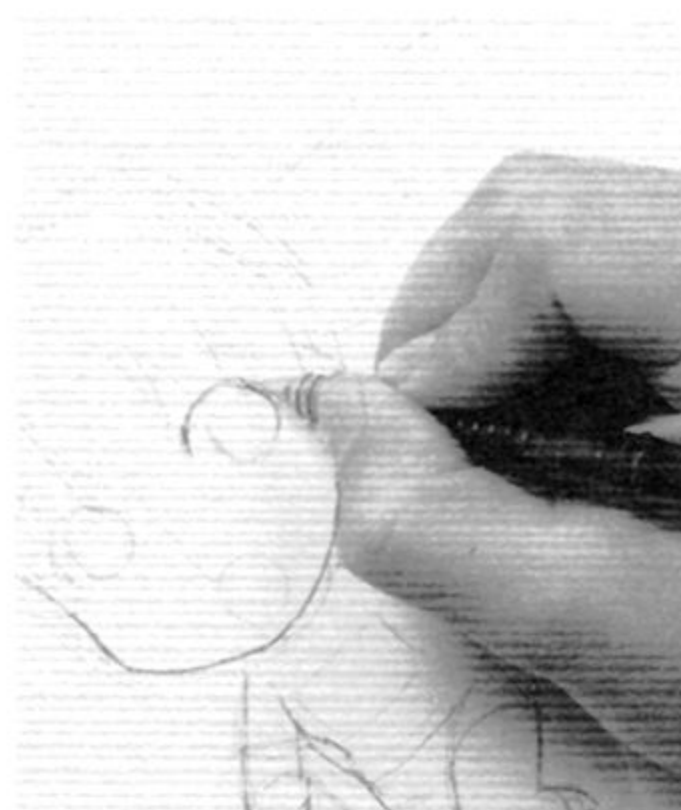
3-1. The Body



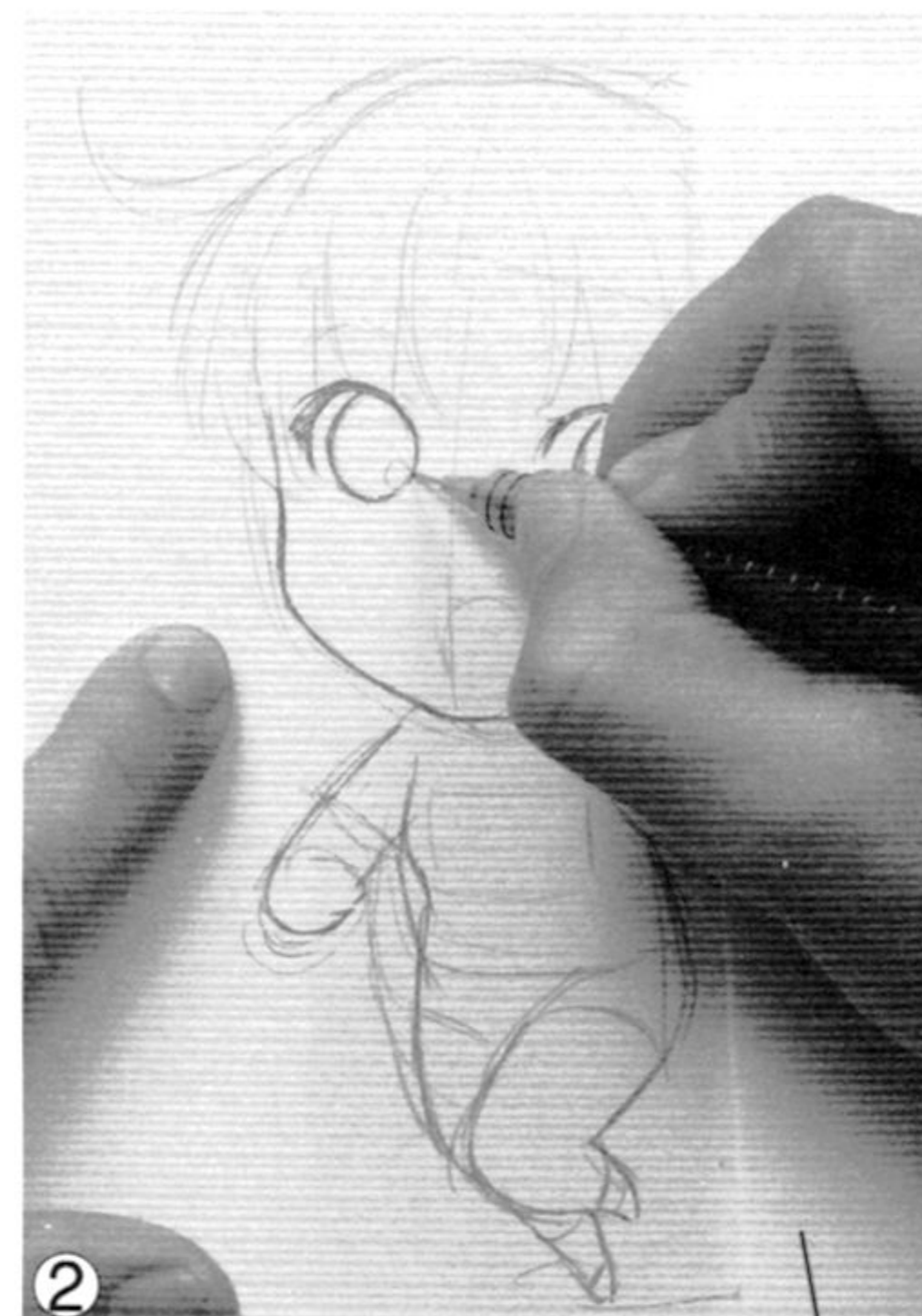
While more clearly defining the hands and feet, Morita sketches layouts of the gym suit's design features.



3-2. The Head

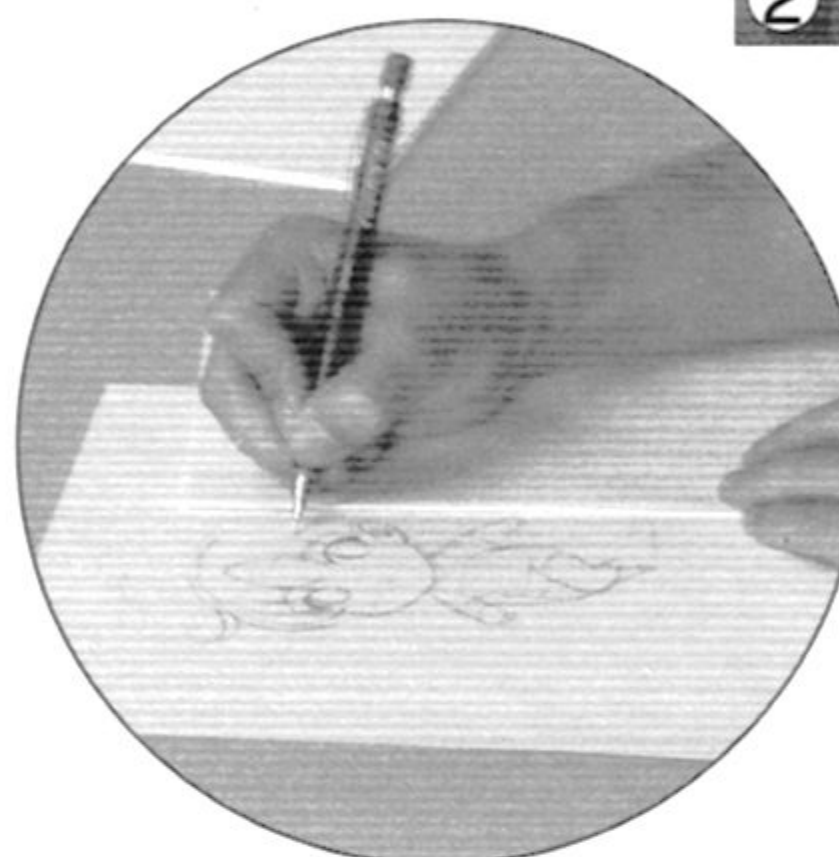


Once you have defined the head's exterior contours to a certain extent, establish the eyes' shapes.

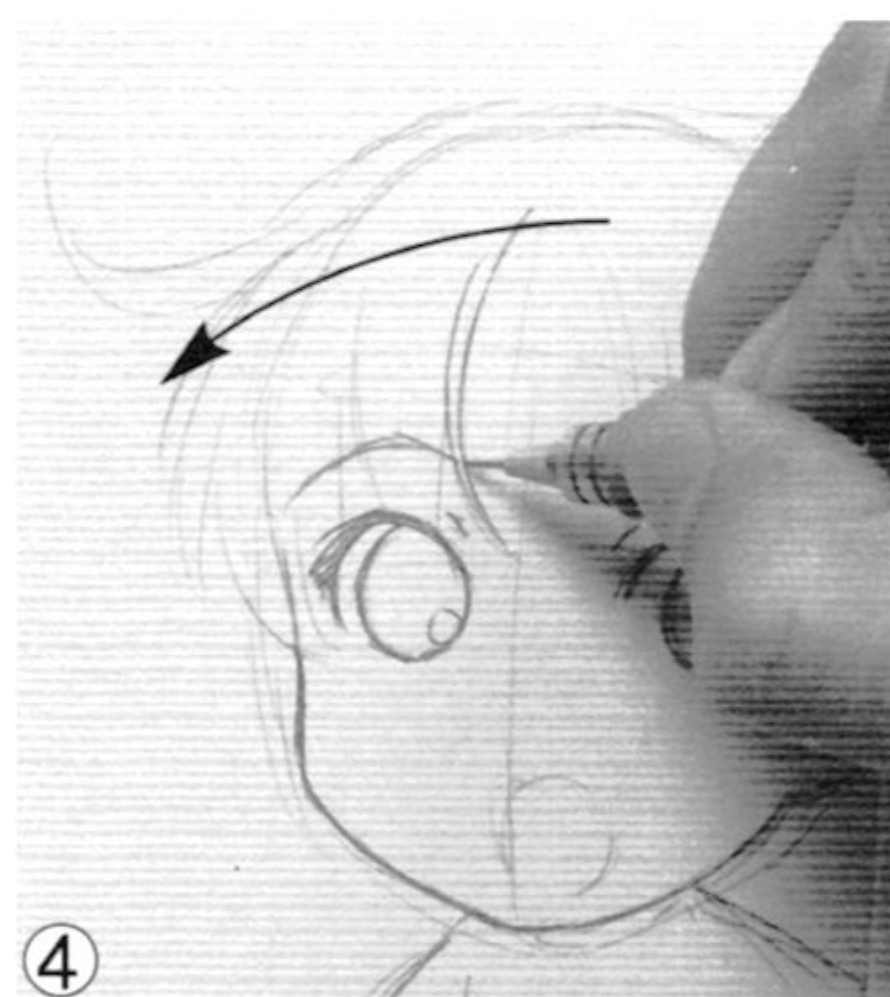


2

Blotter paper



Use blotter paper while drawing at times when your hand feels sweaty.



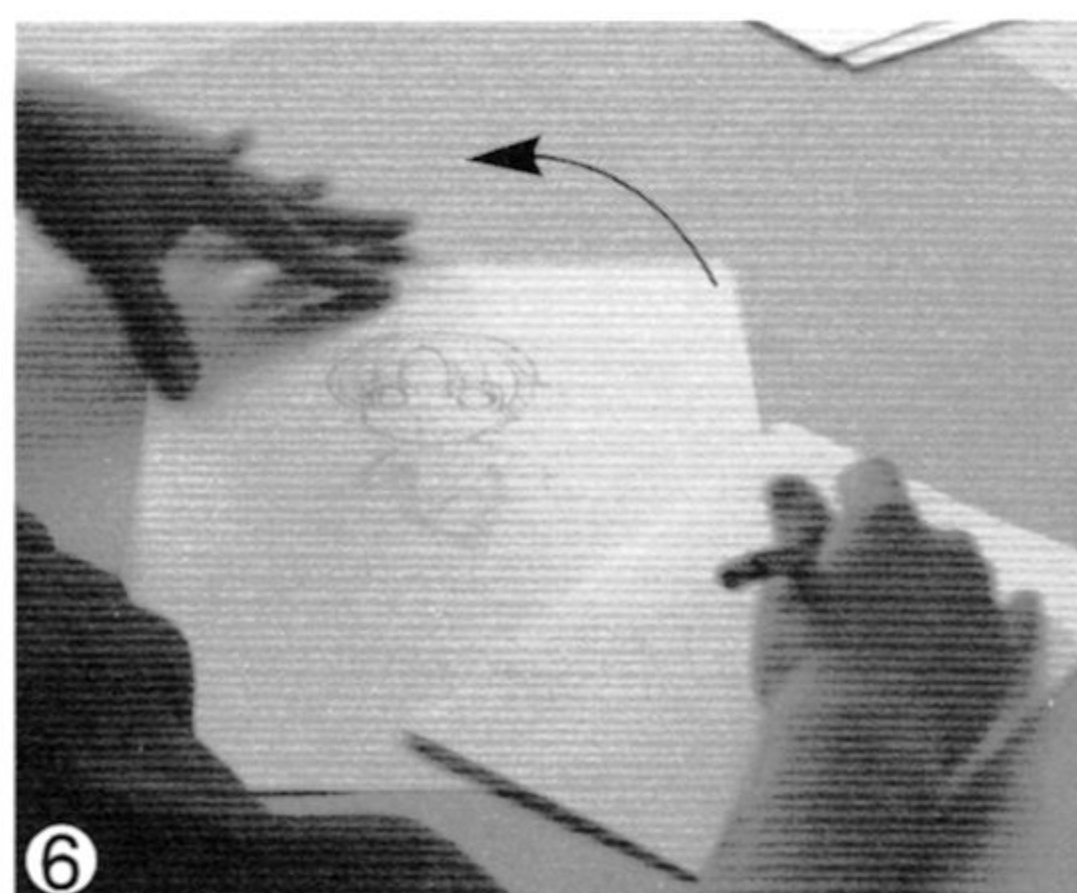
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The arrow indicates the direction in which Morita is drawing the hair.



5

Morita draws the hairline last.

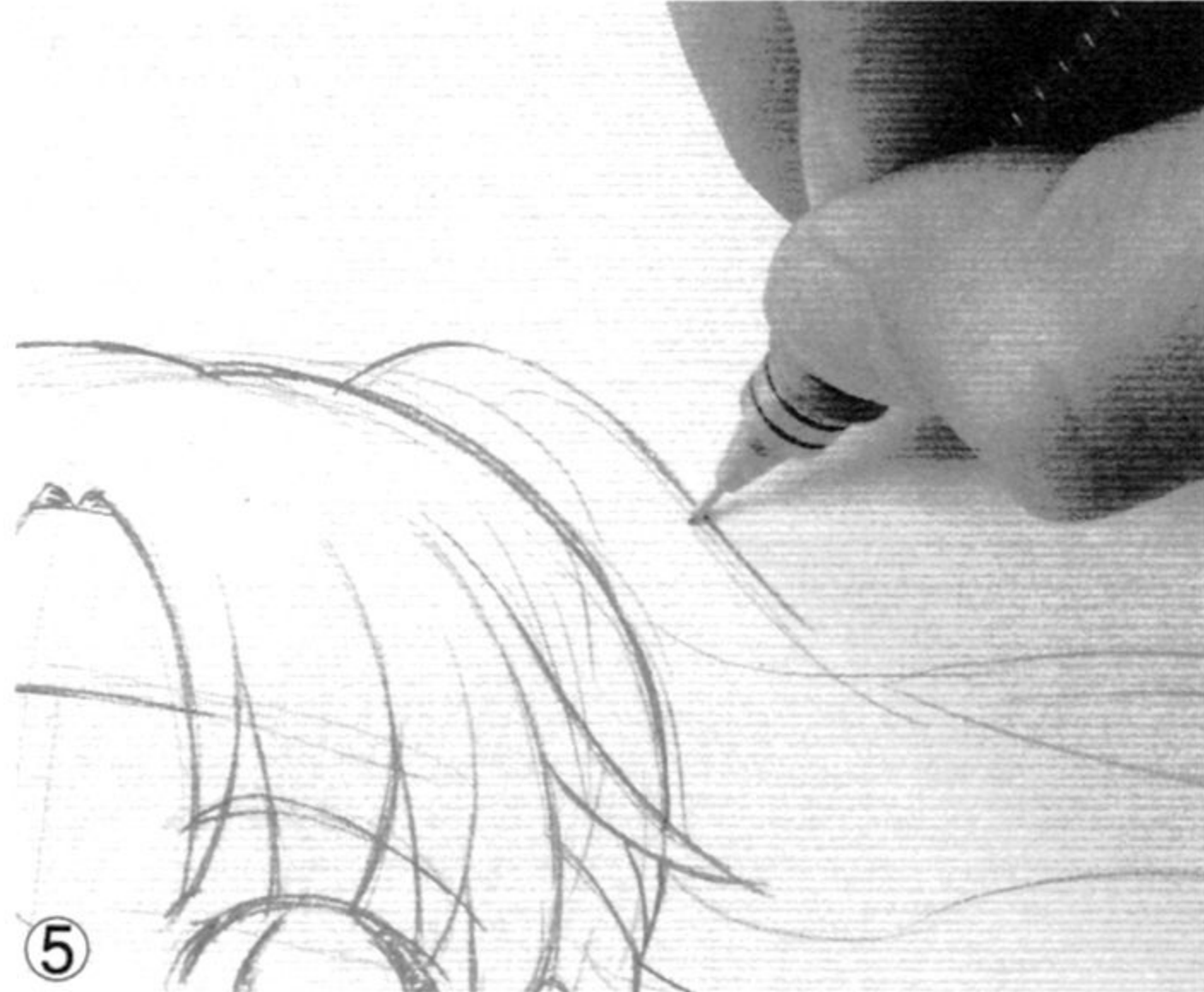
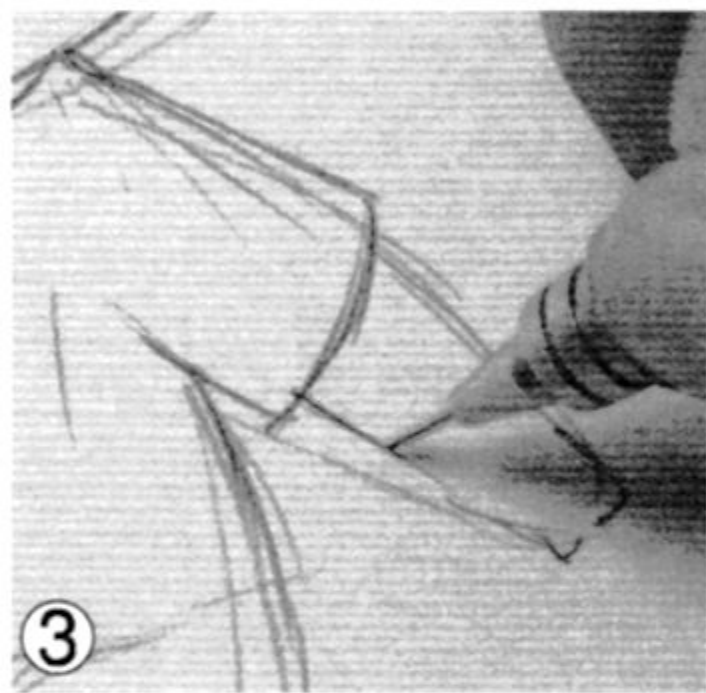
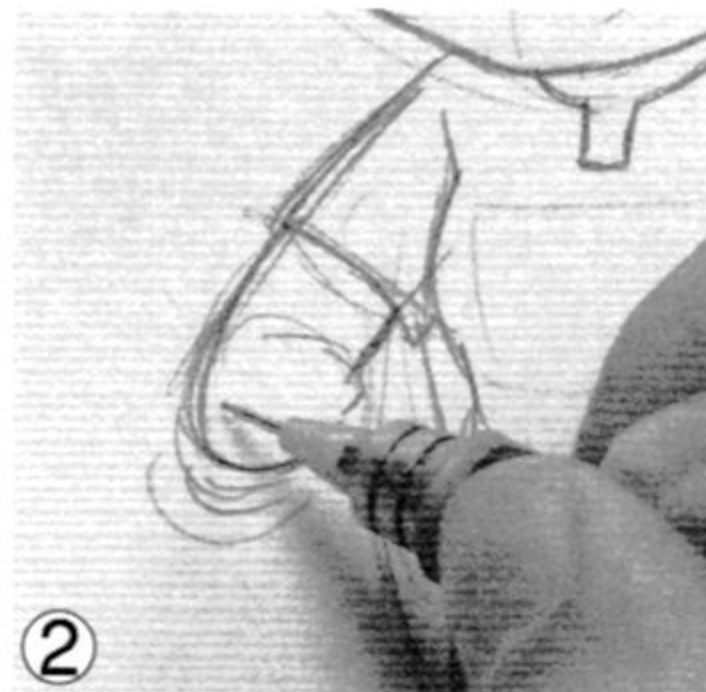
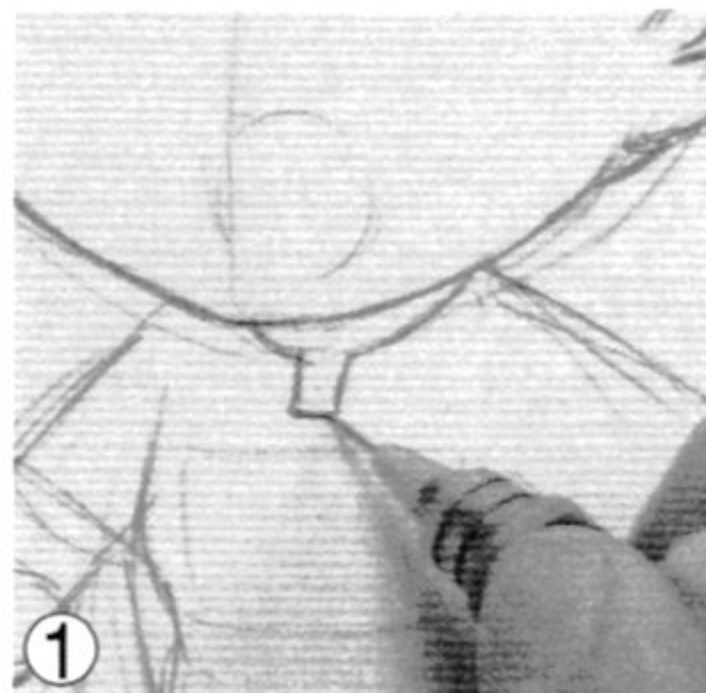


6

When attempting to draw smooth, cleanly defined lines, rotate the drawing paper to the most comfortable direction.

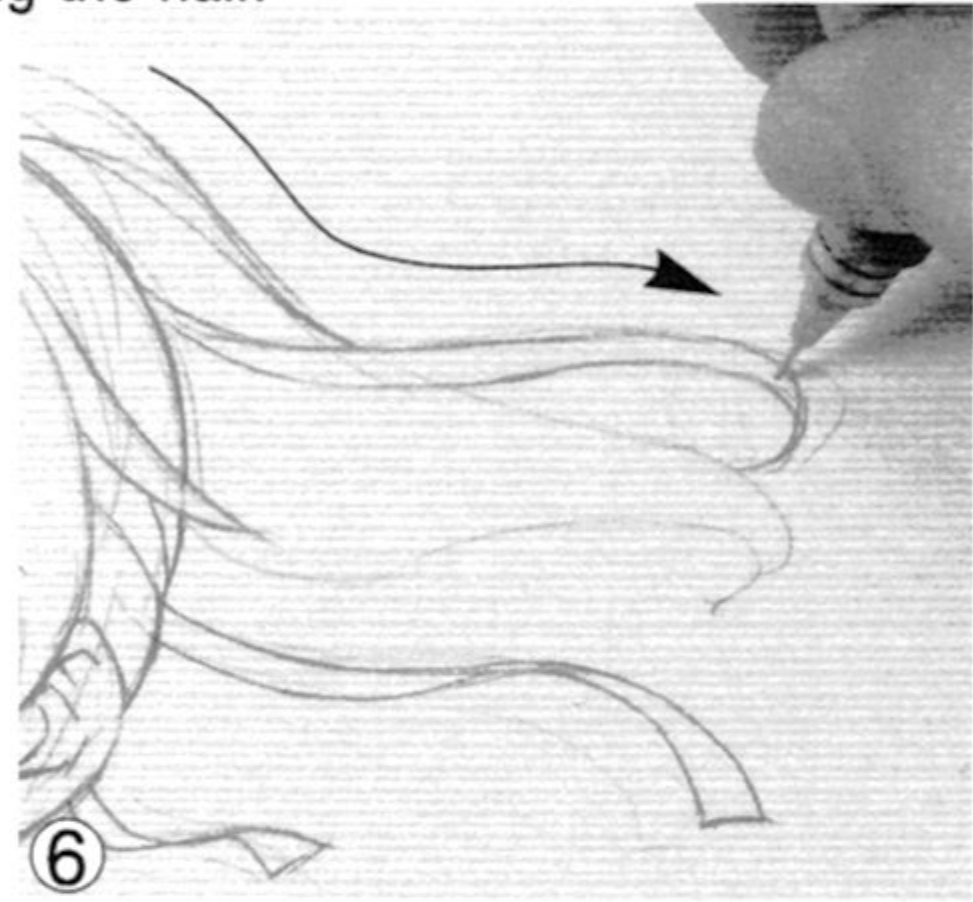


3-3. Adjusting the Figure's Contours Overall

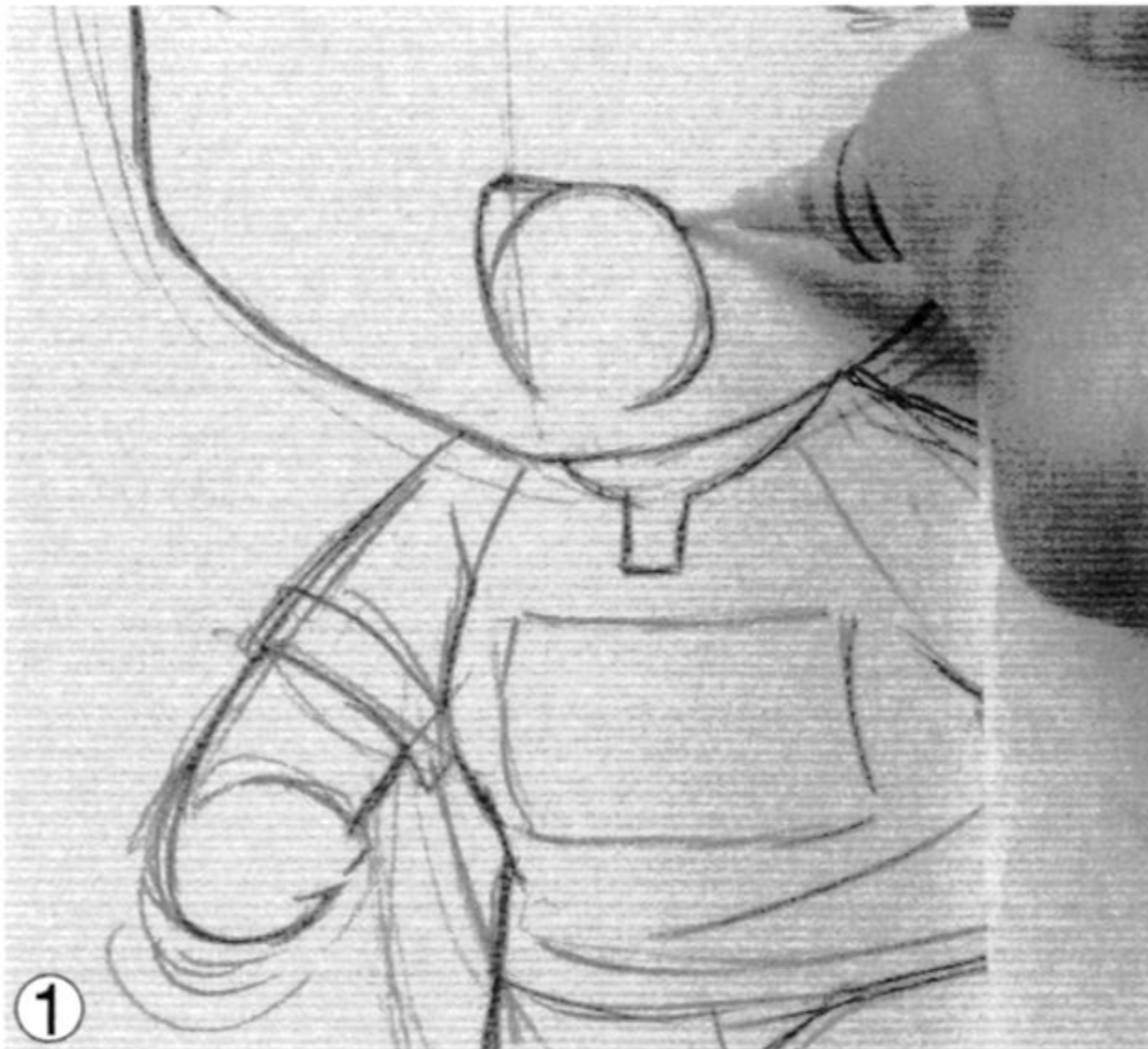


Once you have cleaned up the head and body's exterior contours, begin drawing the hair.

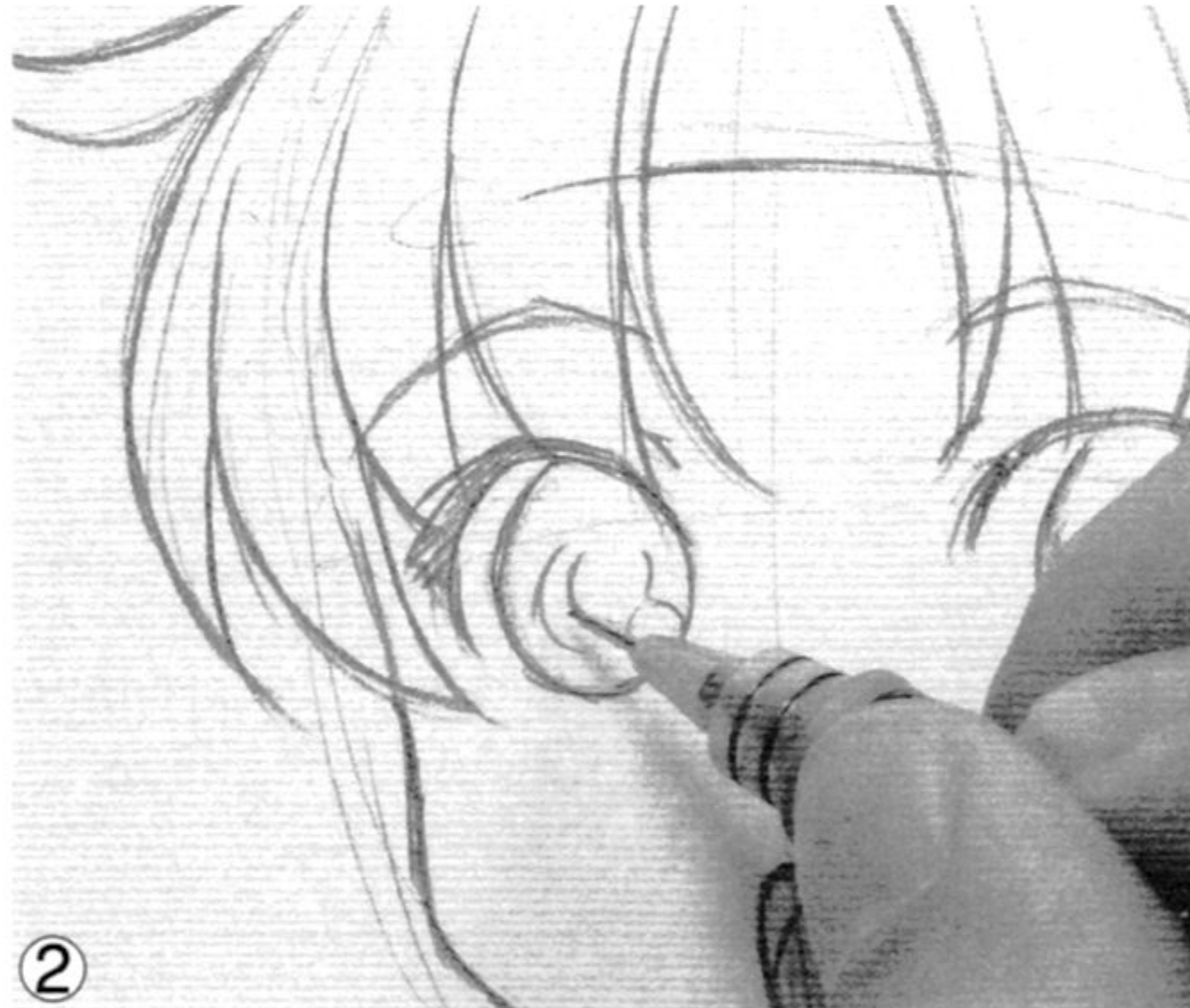
The ponytail requires long, smooth strokes, so Morita carefully adjusts the lines while maintaining tautness in adding the finishing touches to the character.



3-4. Adding the Details and the Facial Features



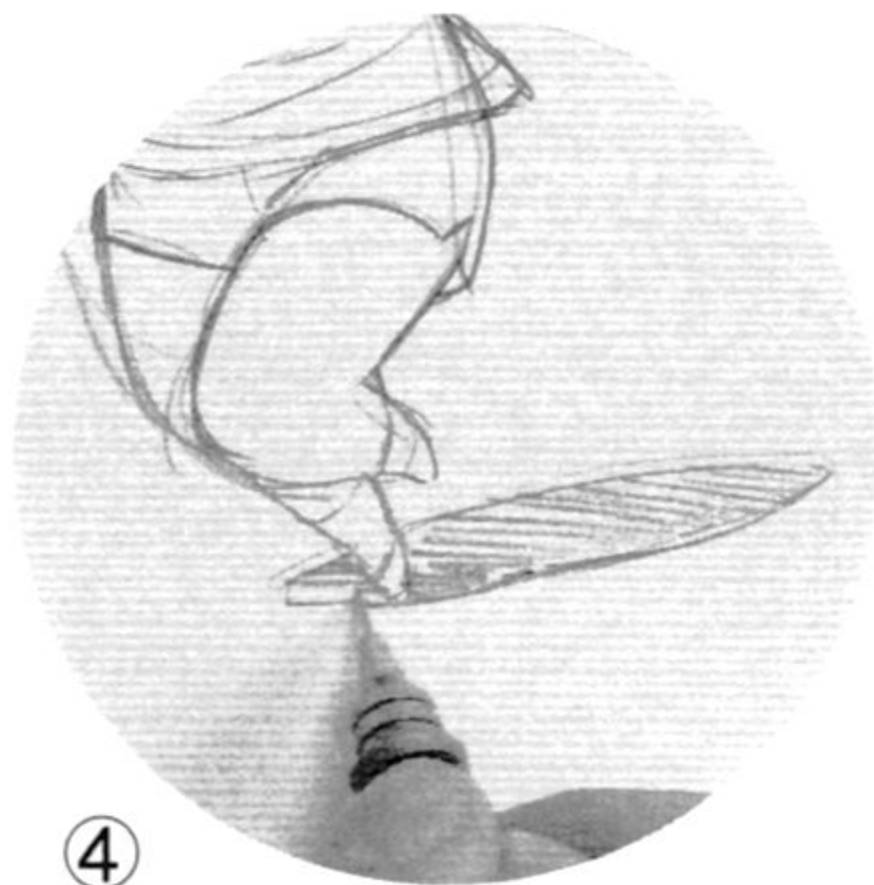
Rounding out the corners causes the facial expression to change dramatically in appearance. Consequently, Morita draws the mouth's contours with extreme care.



Next, Morita draws the eye's pupil and iris with reflected highlights.



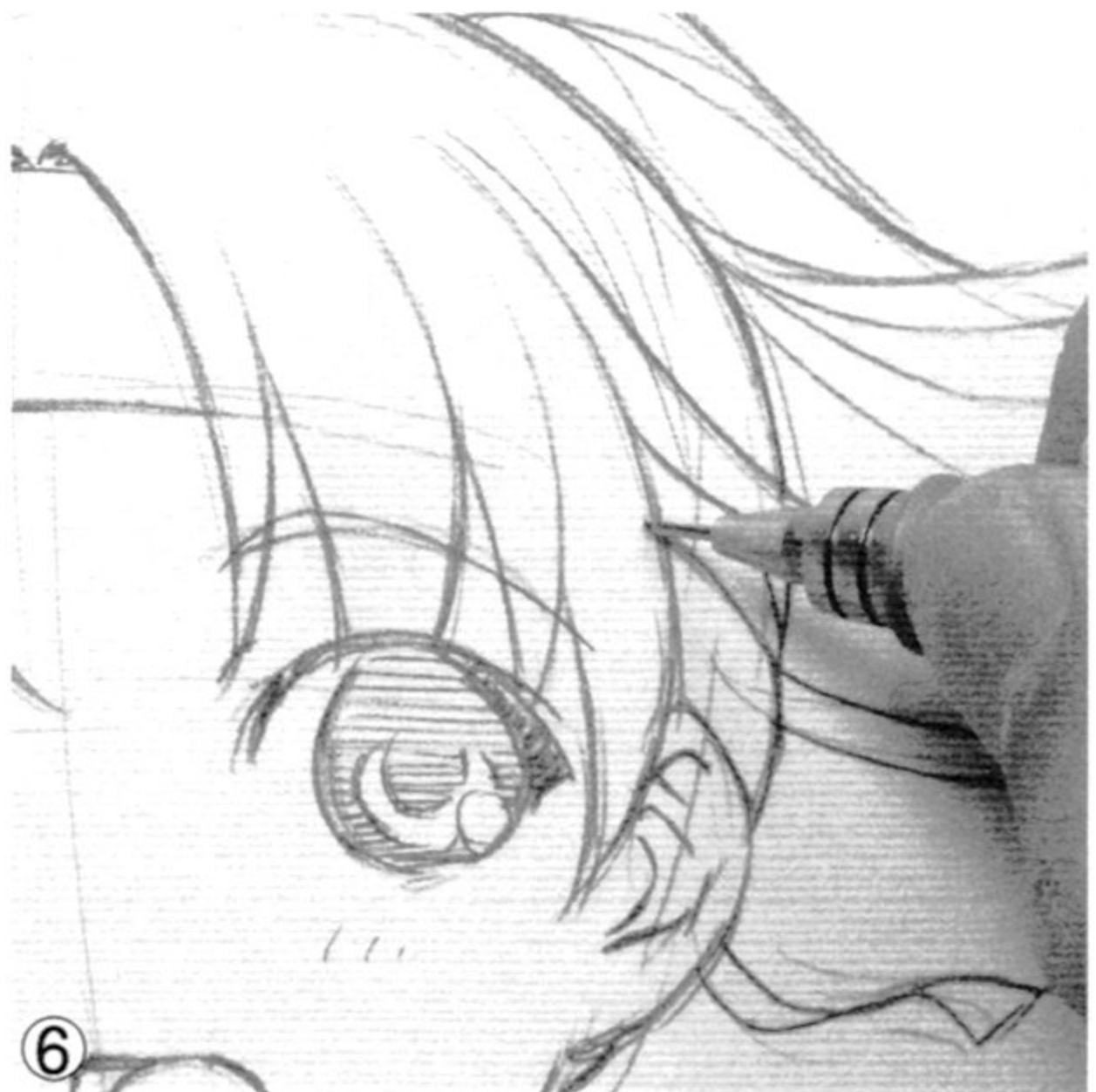
Here, Morita uses hatching to shade the eye.



Morita fills in the shadow at the character's feet.



As final touches, Morita adds a few diagonal lines at the cheeks.

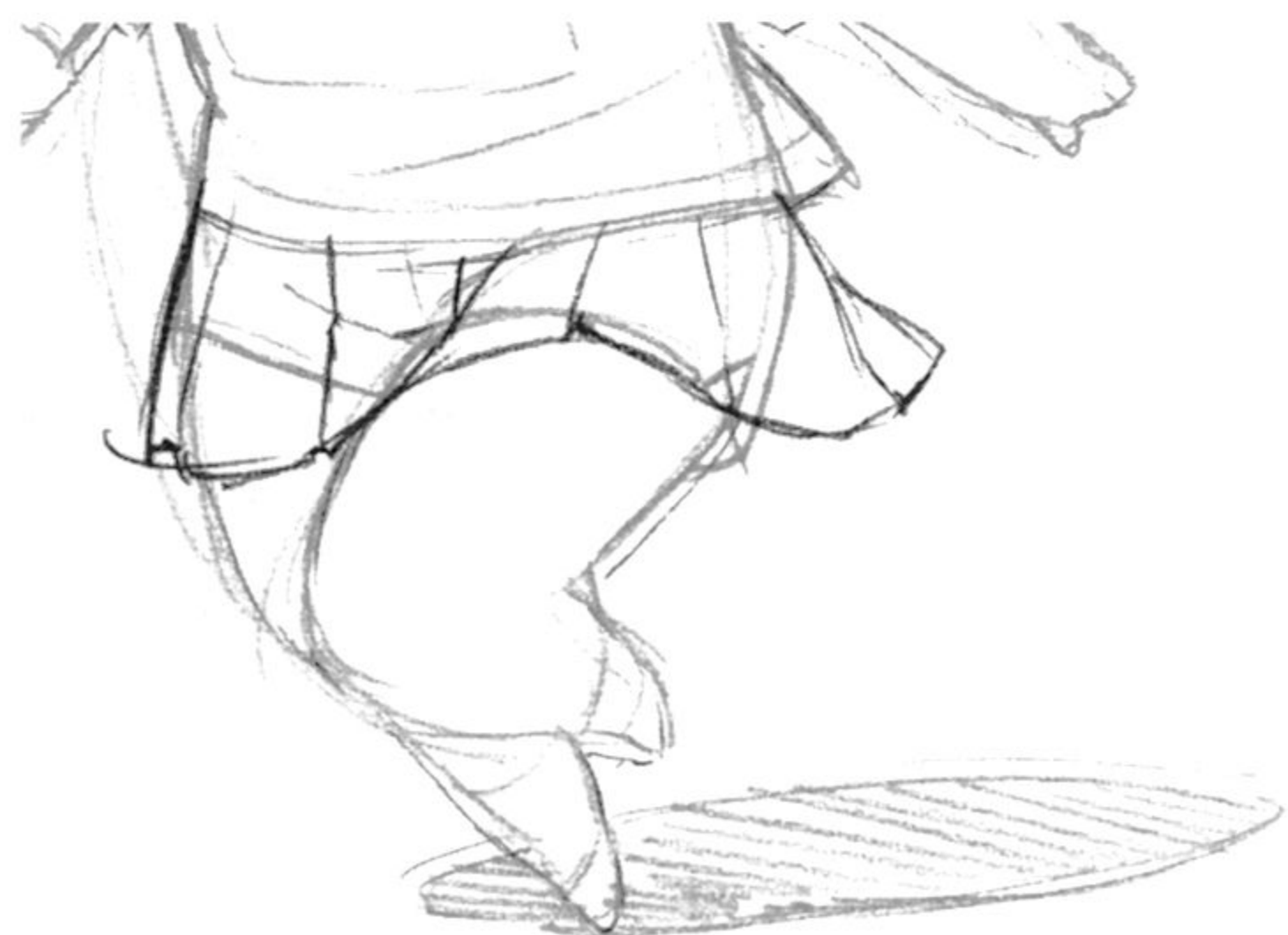


Morita modulates the weight of the strokes, checking the overall visual balance.



After producing a layout of the figure, Morita retraced the contours three to four times before arriving at the final image seen here. When producing your own artwork, use carefully drawn, layered curved strokes, while attempting to preserve a sense of the three-dimensional figure's curved surfaces.

Changing from Shorts to a Skirt



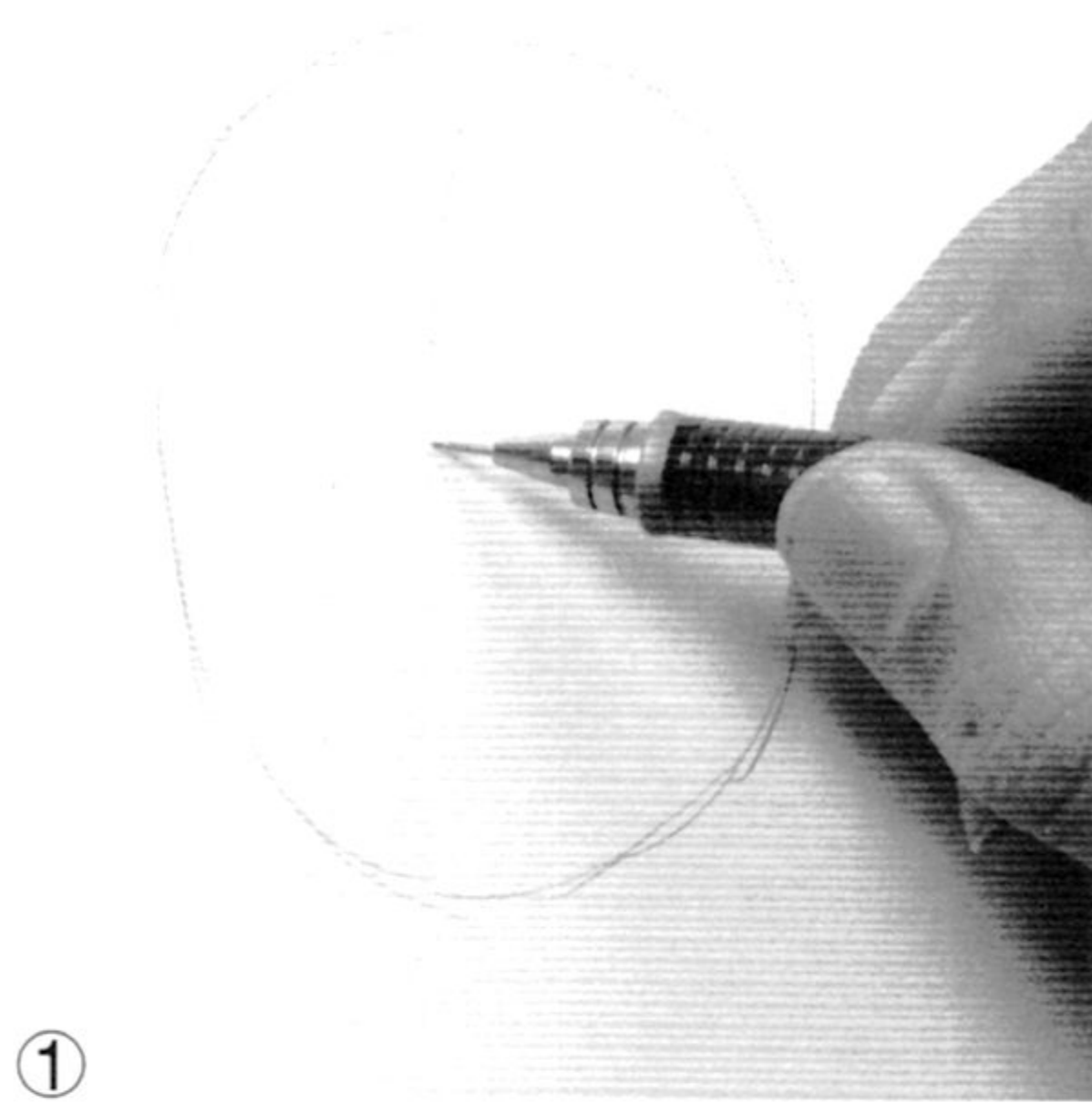
The above shows a miniskirt in place of the shorts. Morita produced this version by laying tracing paper over the original drawing. Even though this is a 1:2 head-to-body ratio character, Morita carefully sketched a layout of the character's body underneath the gym suit, allowing him to modify the suit's design and still have it fit the character perfectly.



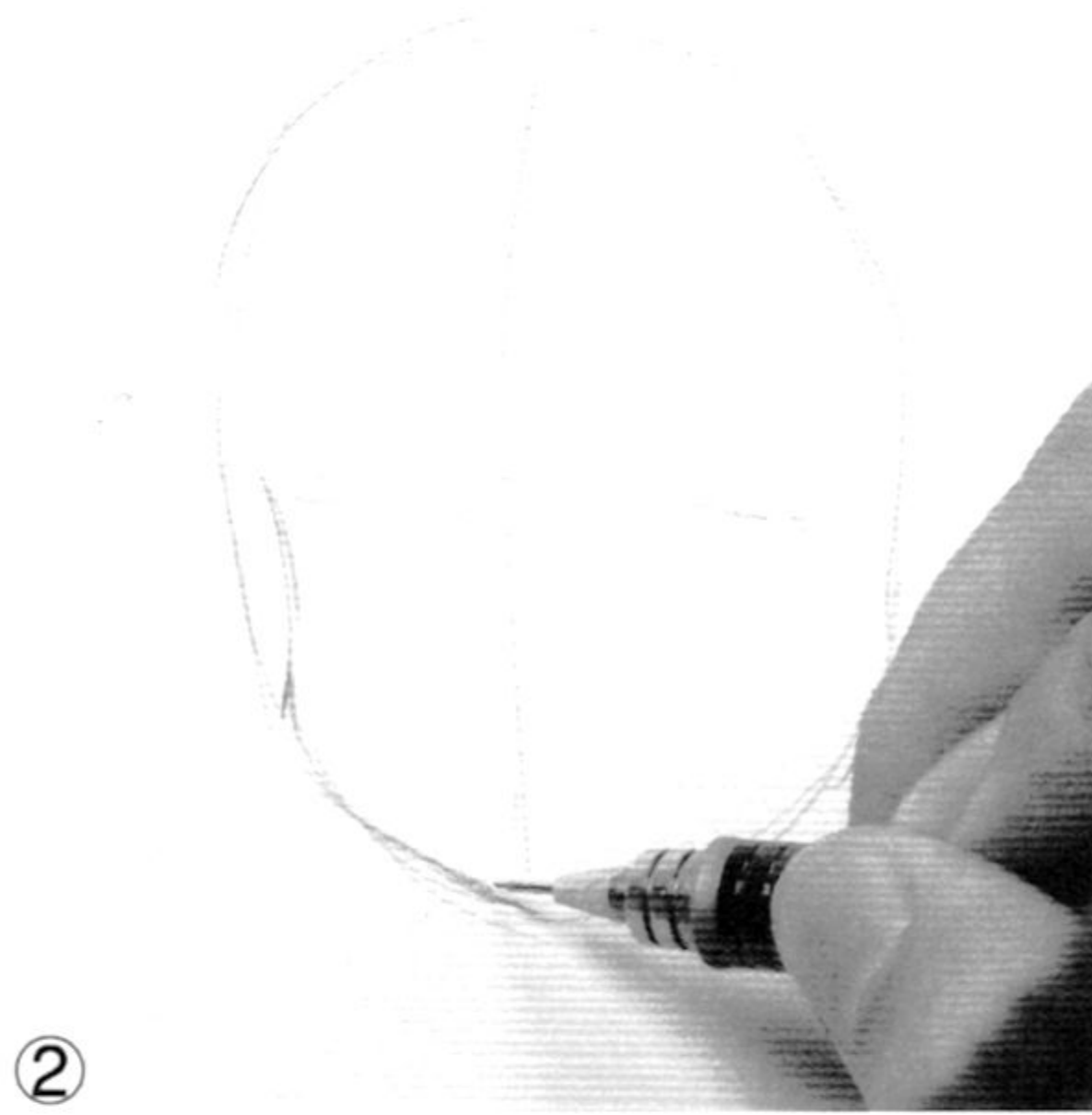
Final Image:
Miniskirt Version

Drawing a 1:2.5 Head-to-Body Ratio Character Wearing a Skirt

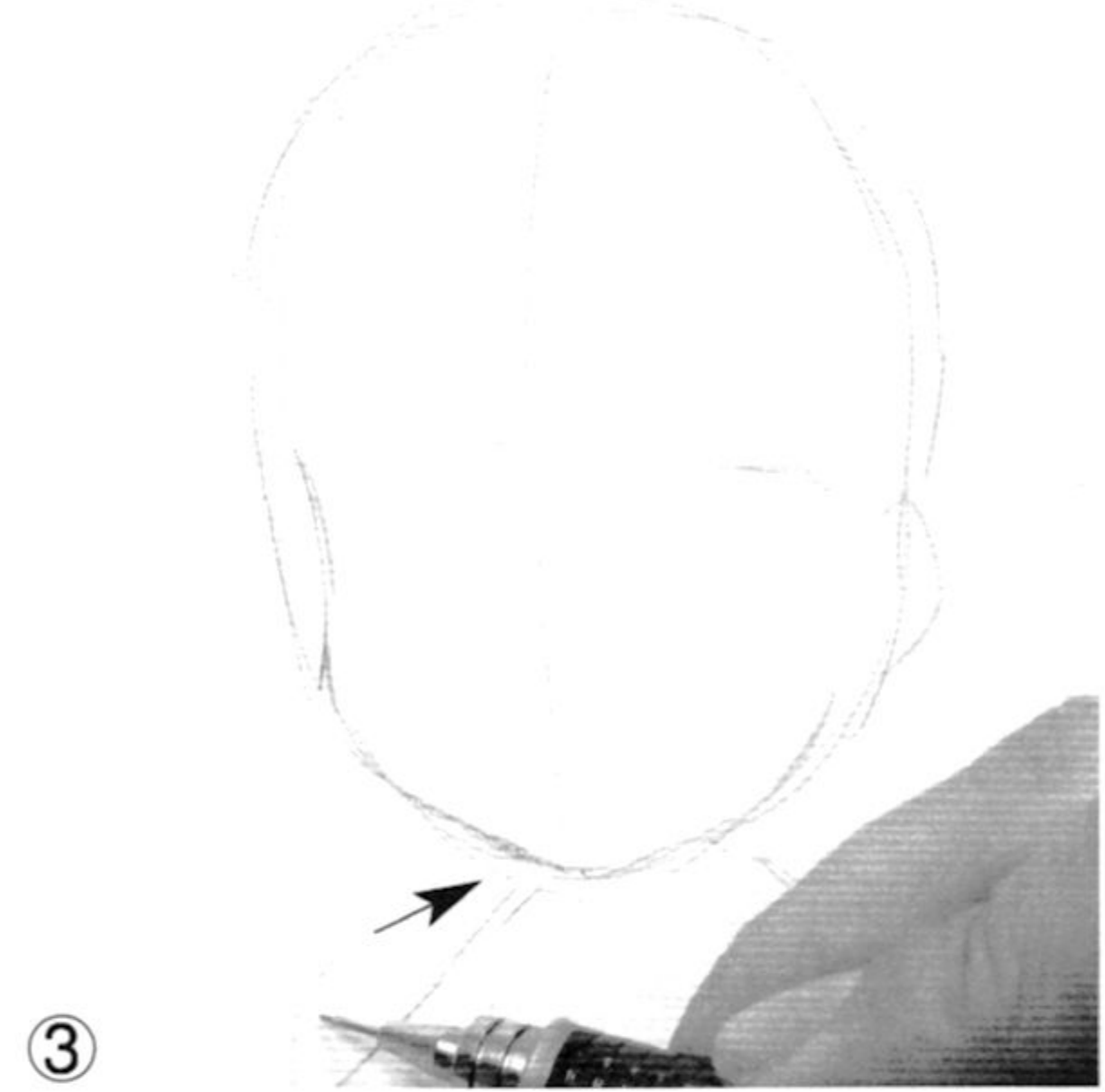
1. Sketching a Circle-and-X Layout and the Neck (Shoulder Width)



① First, Morita draws a circle-and-X layout of the head.



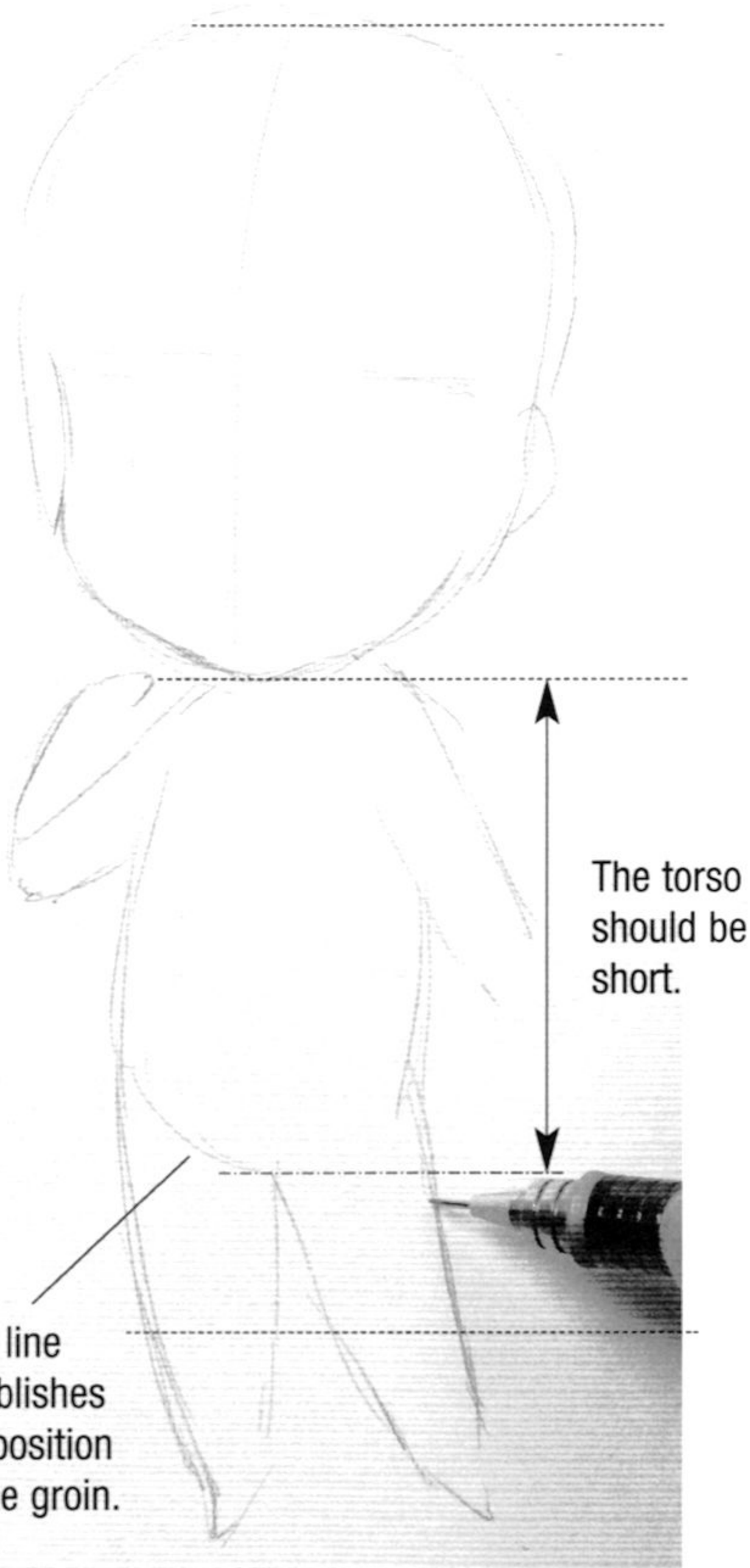
② Next, Morita sketches a rough outline to define the head's shape more clearly.



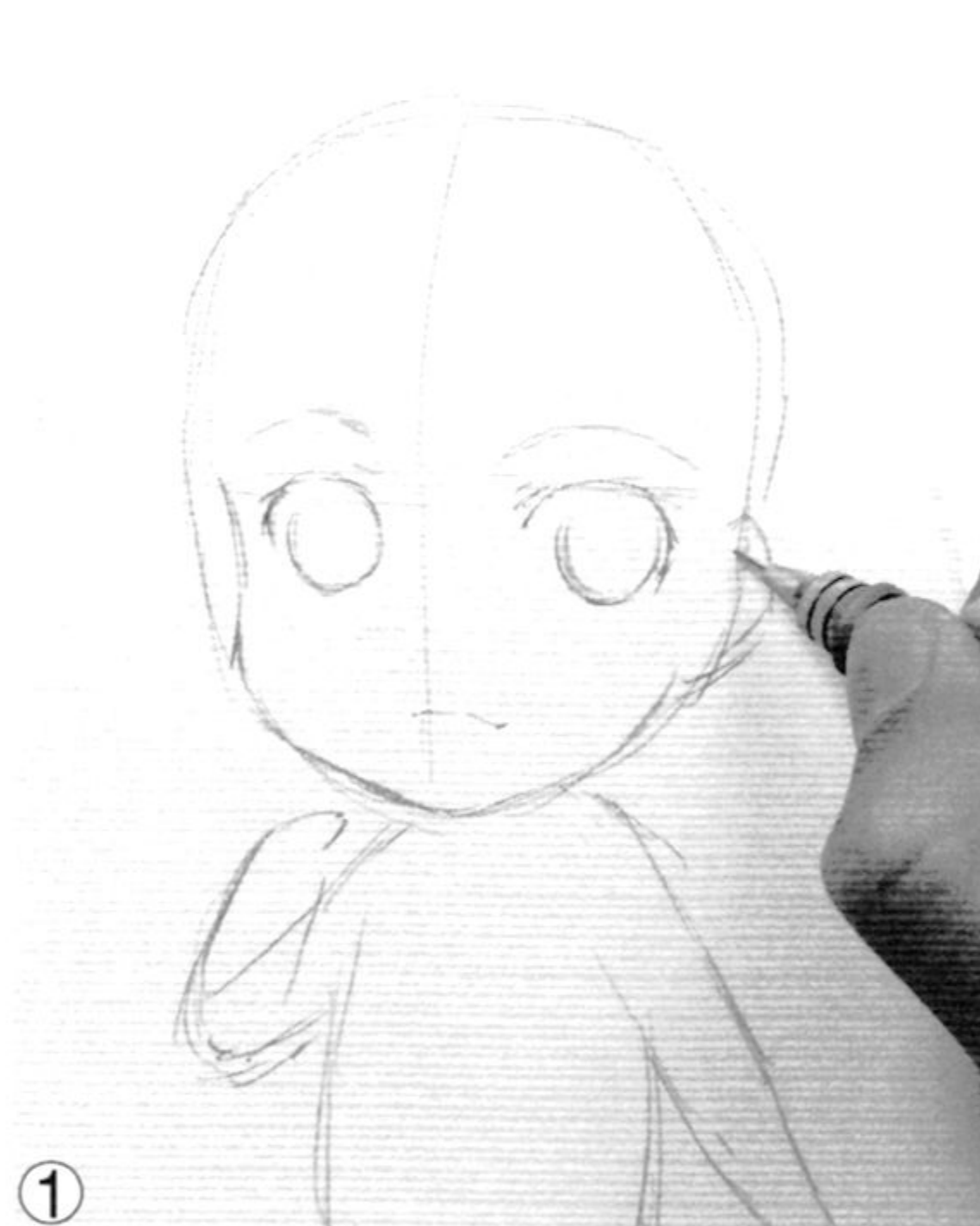
③ When drawing a *chibi* character, omit the neck at this stage and instead draw the shoulders directly touching the head.

2. Sketching the Full Figure Layout and the Head LayoutWidth)

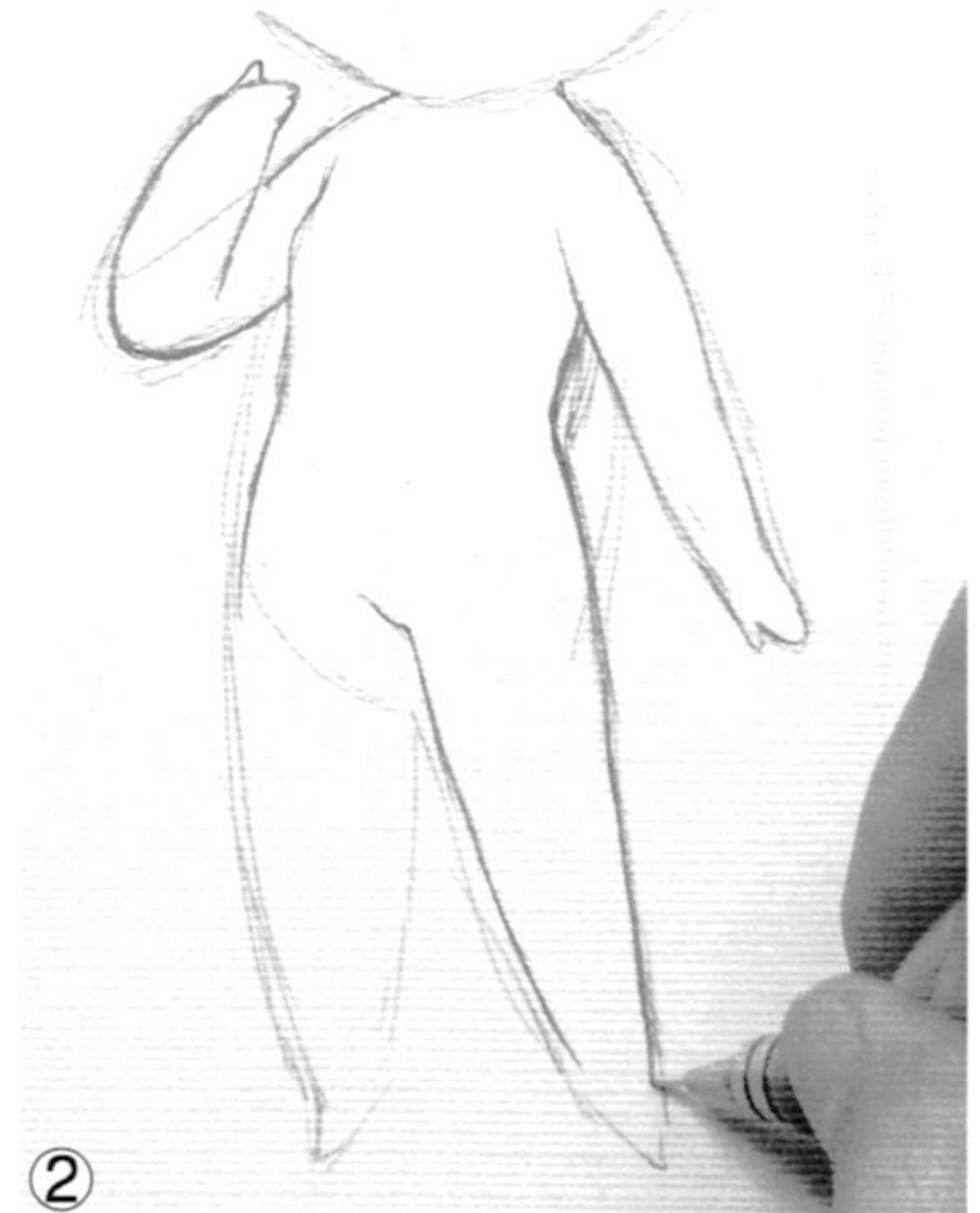
3. Retracing While Adjusting the Contours



On a 1:3 head-to-body ratio character, the head and the torso are essentially the same length. On a character drawn at a 1:2.5 head-to-body ratio, the head should be longer than the torso. The legs' length gives the *chibi* her cute appearance, making where to position the groin a key point in the figure's design.



① Once Morita finishes the body's exterior contours, he moves on to the face.



② Here, Morita defines the body's exterior contours more clearly.

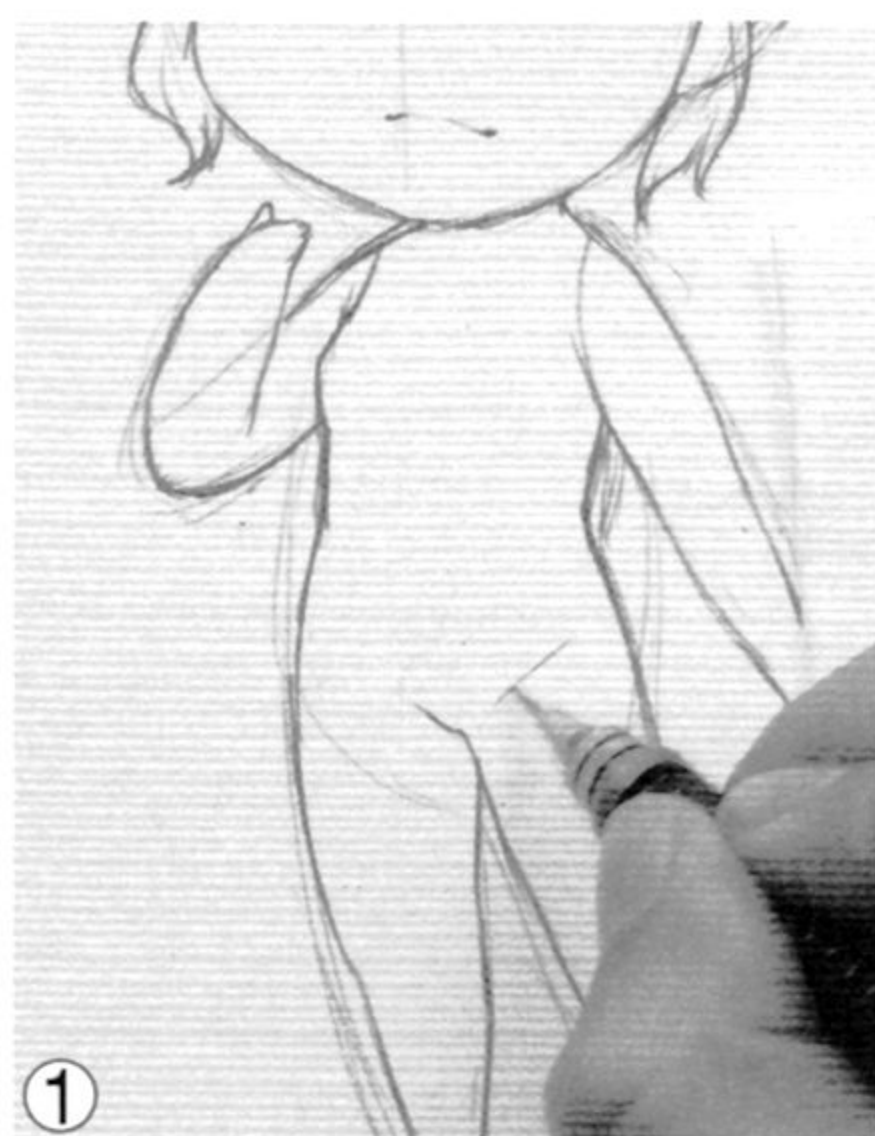


③ Draw the face and hair after completing the body.



④

Drawing the Clothes

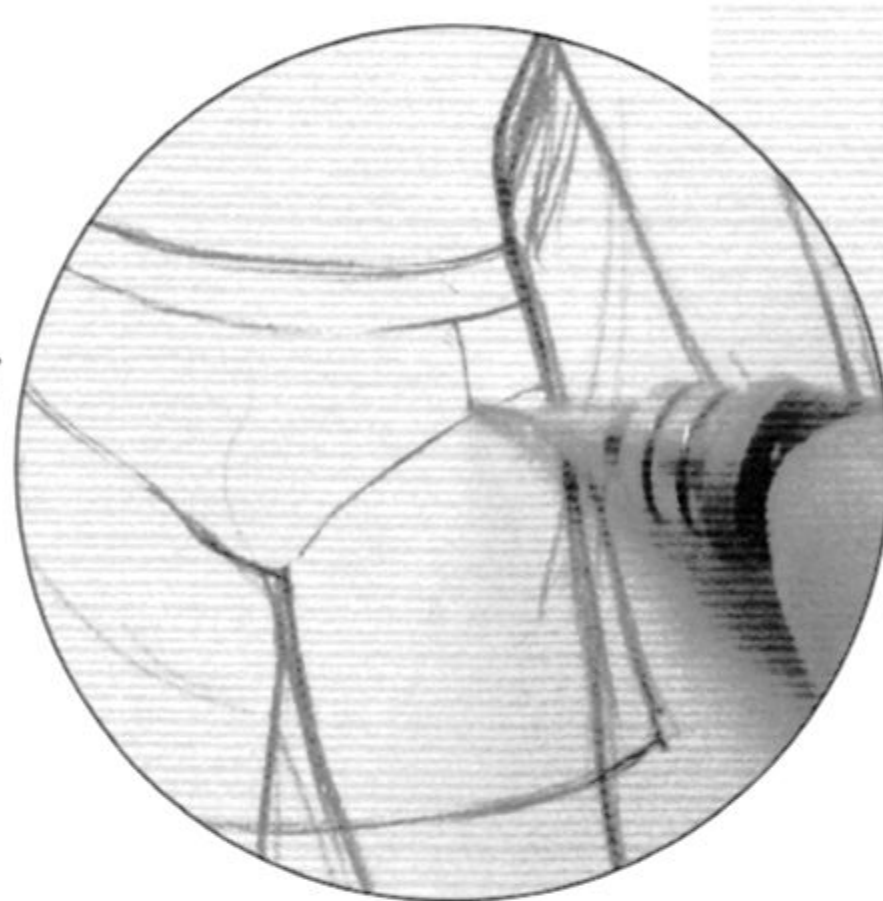


① After Morita has finished the figure, he adds the clothes. First he draws the panties. Clearly planning where and how the clothing is worn makes it easier to grasp the overall visual balance.



② Here, Morita draws the waistline, which plays a vital role in balancing the clothing's proportions.

The skirt's waist and zipper are drawn according to where the waistline is positioned.



③ Next, Morita draws the skirt's outline. He uses a trapezoidal form that extends beyond the legs. The hem forms a gentle curve, giving the skirt a three-dimensional feel.

Drawing the Eyes



Morita fills in the eye details to complete the face.

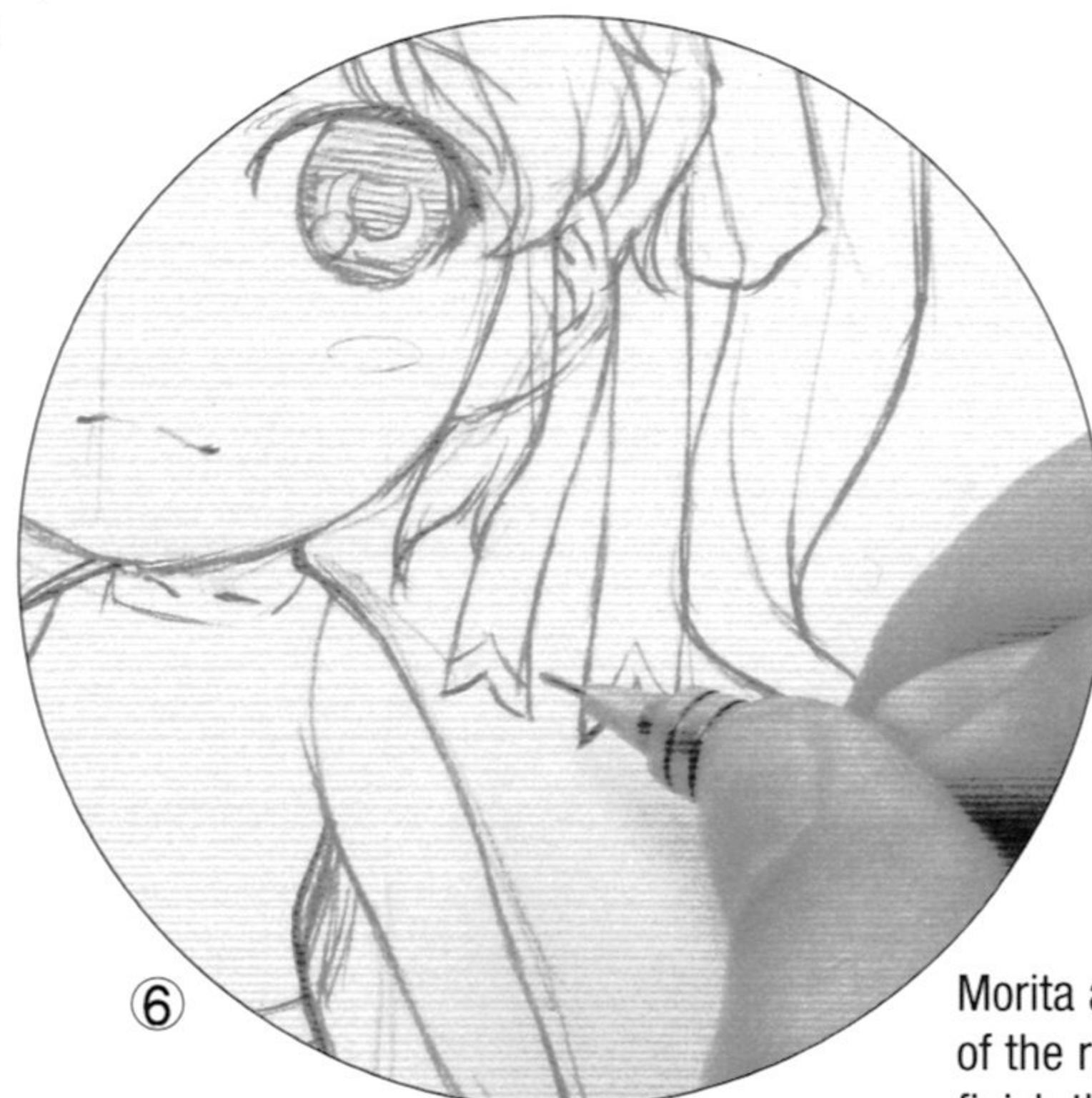
Drawing the Ponytail



① After having essentially completed the character, Morita begins adding the ponytail. He starts by using light strokes to sketch a contour layout.



④ While maintaining awareness of the overall visual balance, Morita adds small lines, layering two to three strokes over each other, gradually building up and darkening the contours until he has achieved clearly defined lines.



⑥ Morita adds the ends of the ribbons to finish the drawing.



The resulting character has a head-to-body ratio of 1:2.5.



The above figure shows a more voluptuous body with slenderer arms and legs.



Although this is still the same *chibi* character, modifying the body below the head allows you, the artist, to produce a wide range of variations.



This study shows the same head drawn on two figures of different head-to-body ratios. Adjusting the length of the torso, arms, and legs as well as their thicknesses also completely changes the atmosphere that character projects.



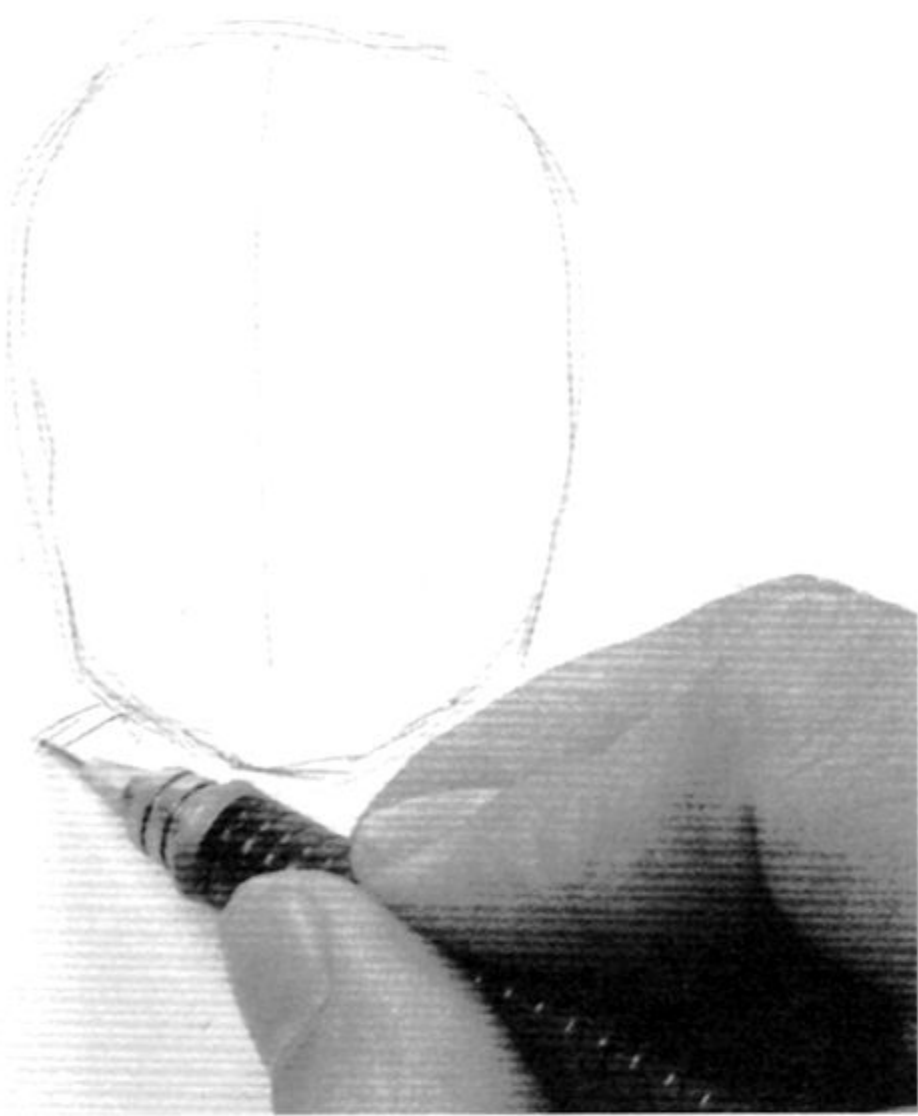
1:2 head-to-body ratio



1:3 head-to-body ratio

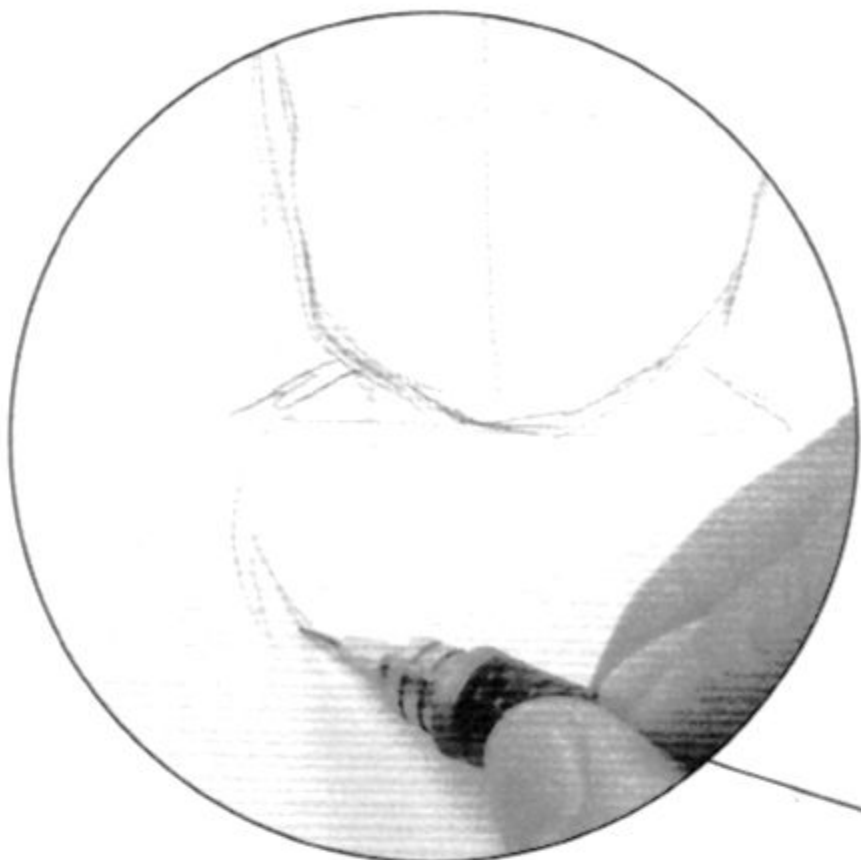
Drawing a Brawny Character: 1:2.5 Head-to-Body Ratio

1. Sketching a Circle-and-X Layout and the Neck (Shoulder Width)

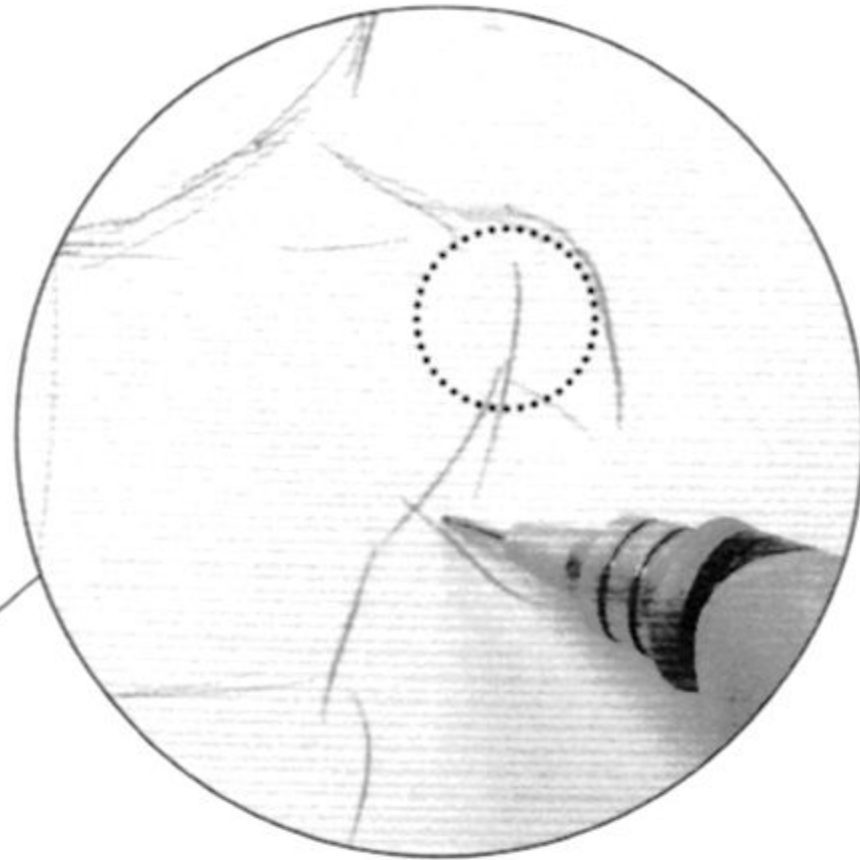


Morimoto attaches the torso and shoulders directly to the head.

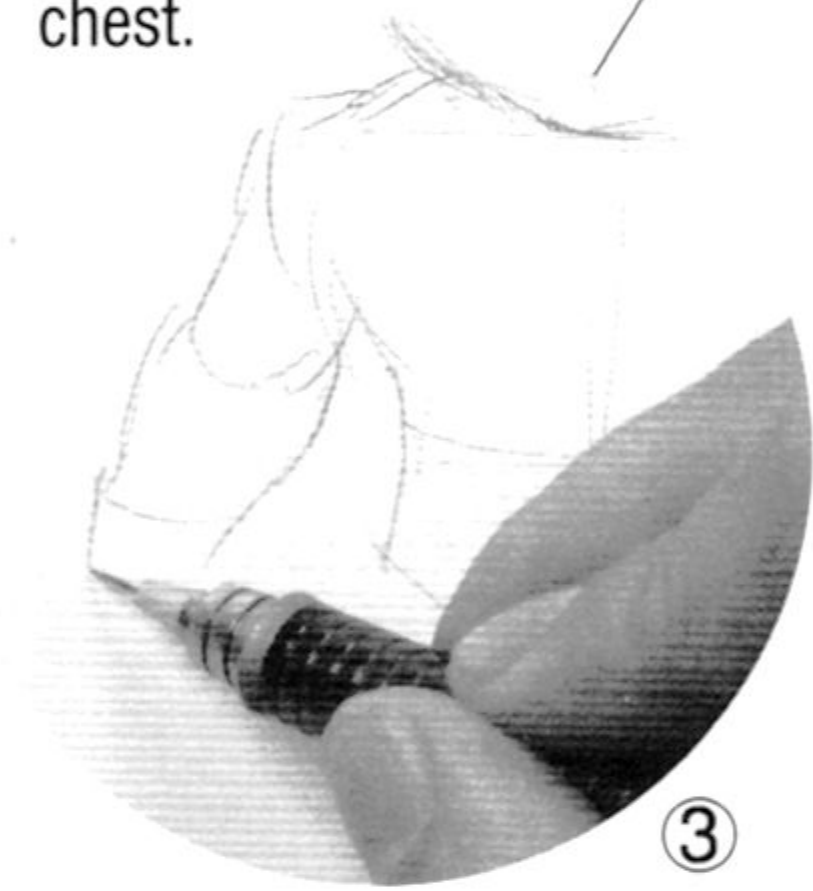
2. Sketching the Full Figure Layout and the Head Layout



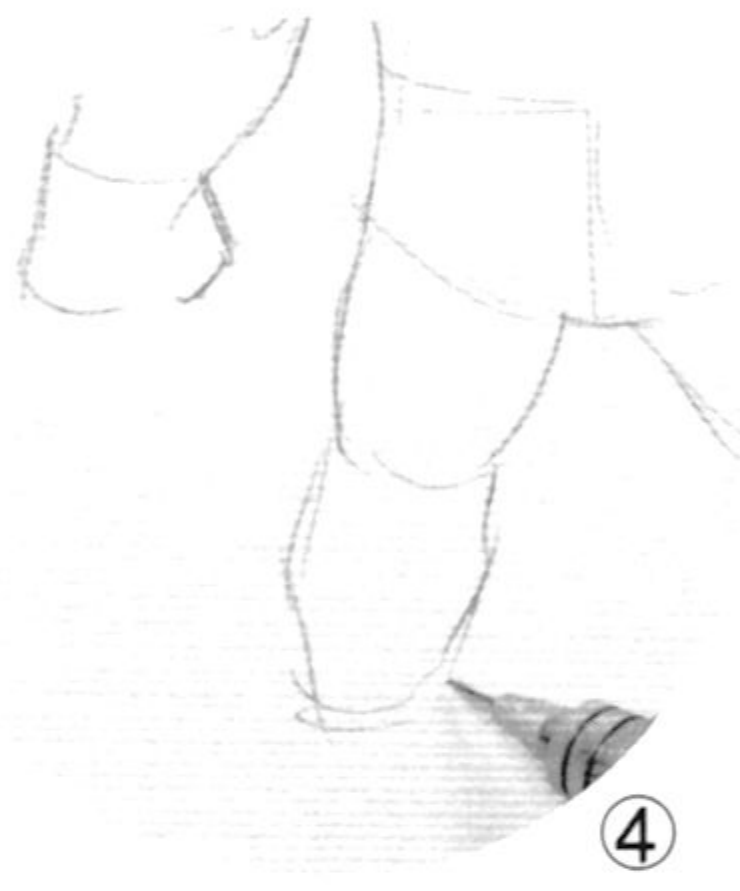
① Morita sketched these strokes as he adjusted the shape until he was able to produce a simplified, satisfying rendition of a muscular chest.



② Morita adds the shoulders, using circles to represent the joints.



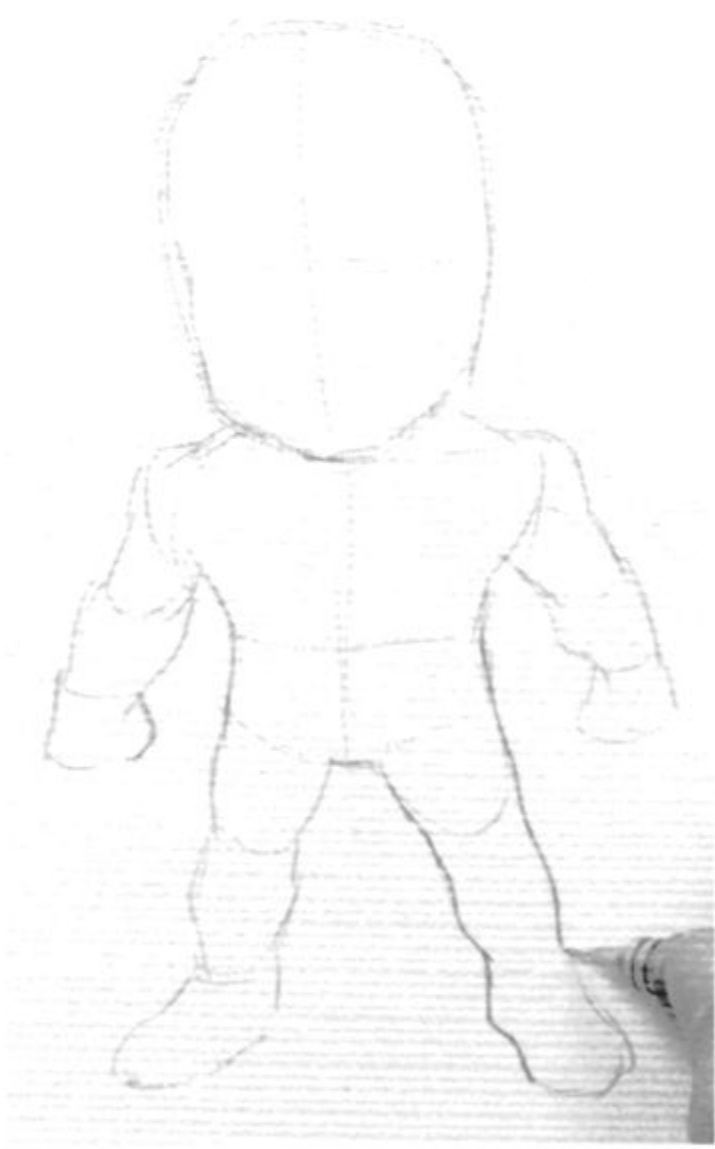
③



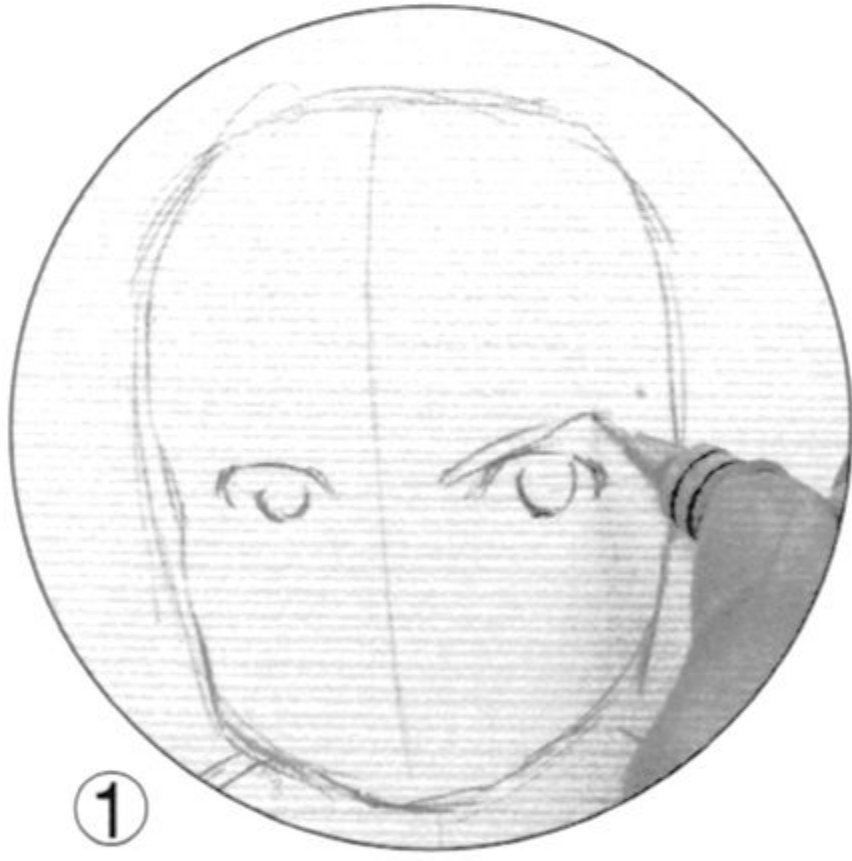
④

When drawing a figure layout, use abstracted geometric shapes to represent the arms and legs, assembling them into a body.

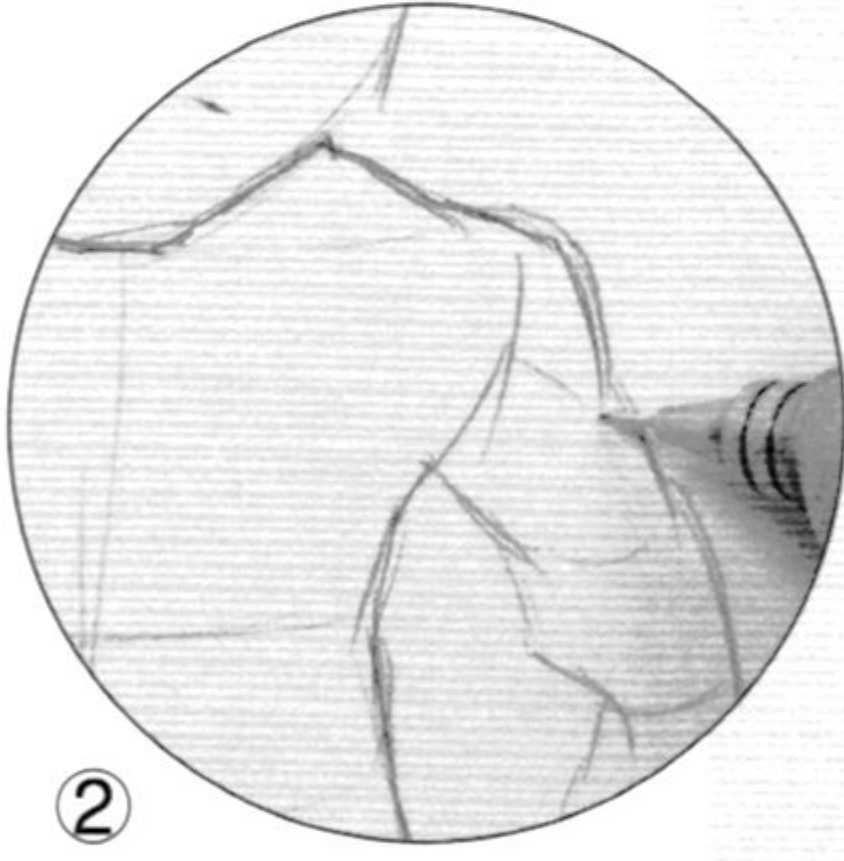
3. Retracing While Adjusting the Contours



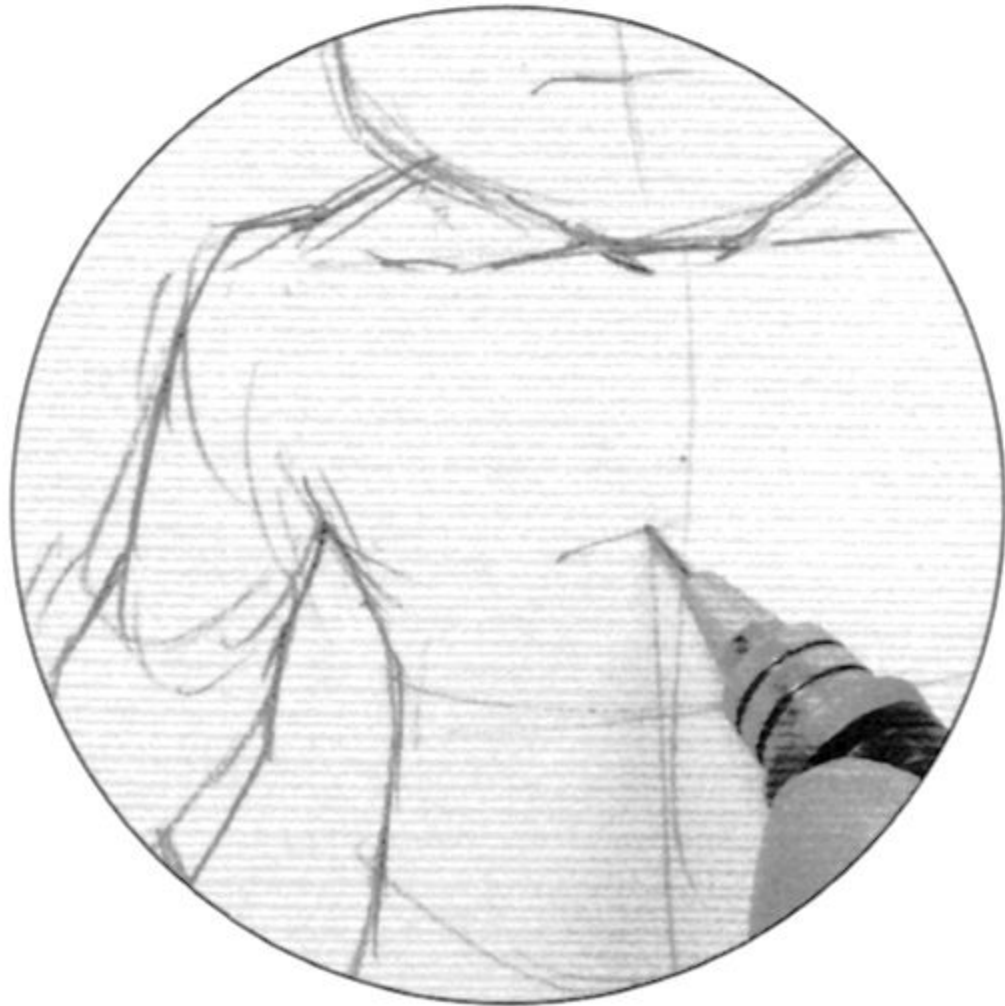
Morita uses abstract, geometric shapes to render the distinctive body contours created from bulky muscle.



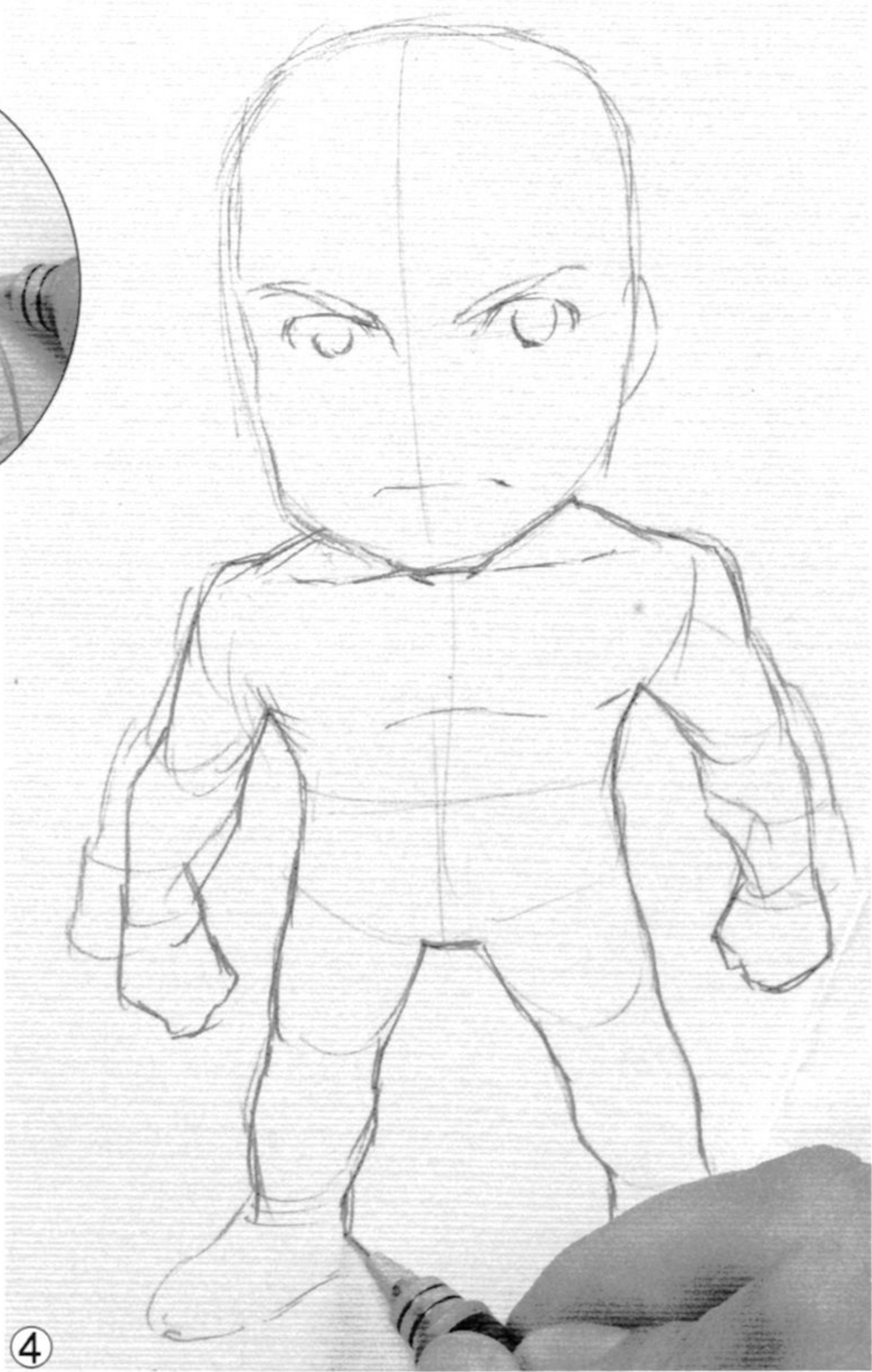
① Morita adds the eyebrows after having first drawn the eyes' layouts.



② Morita layers strokes to build the exterior contours.



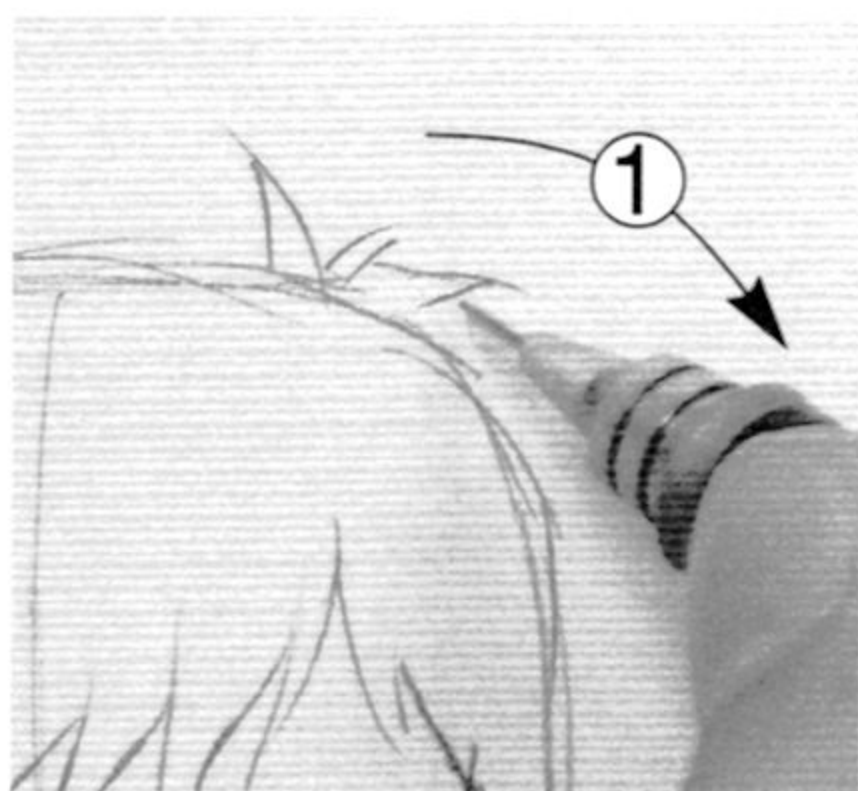
③ Here, Morita uses a gently curved arc to simplify the chest's contours and avoid overemphasizing the musculature.



④

Next, Morita adjusts the contours of the figure overall.

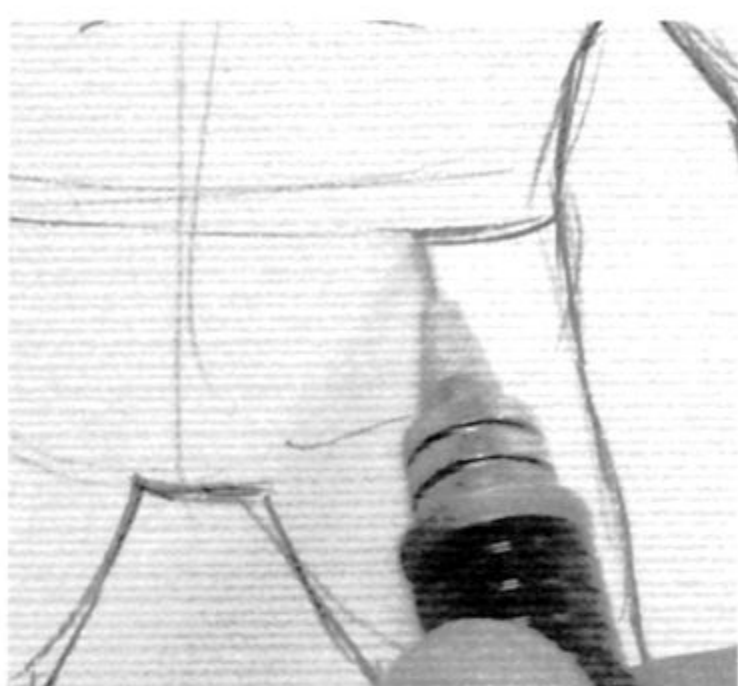
Adding the Hair and Details



Morita decides where to draw the hair whorl and adds it.

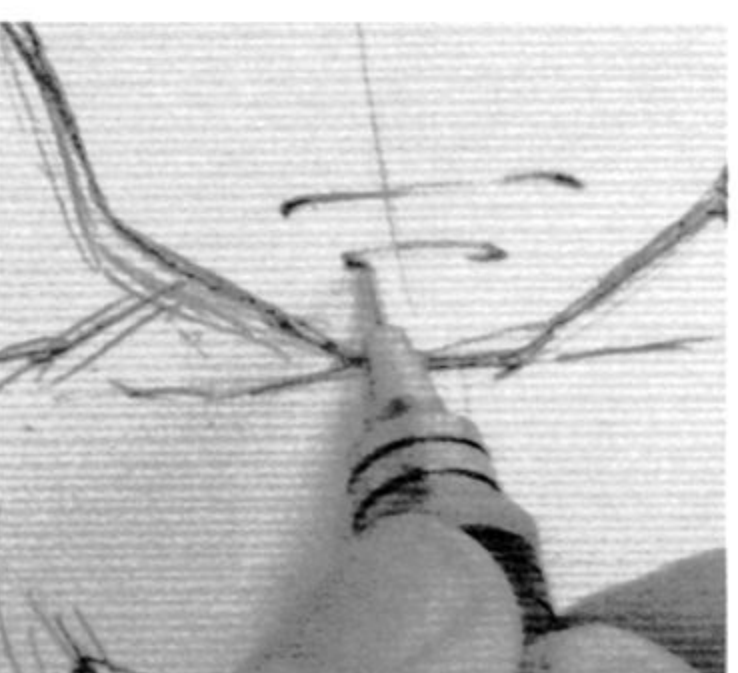


When drawing the hair, follow the head's layout contours.



Work from higher to lower regions when drawing around the waist and the legs.

Finishing Touches

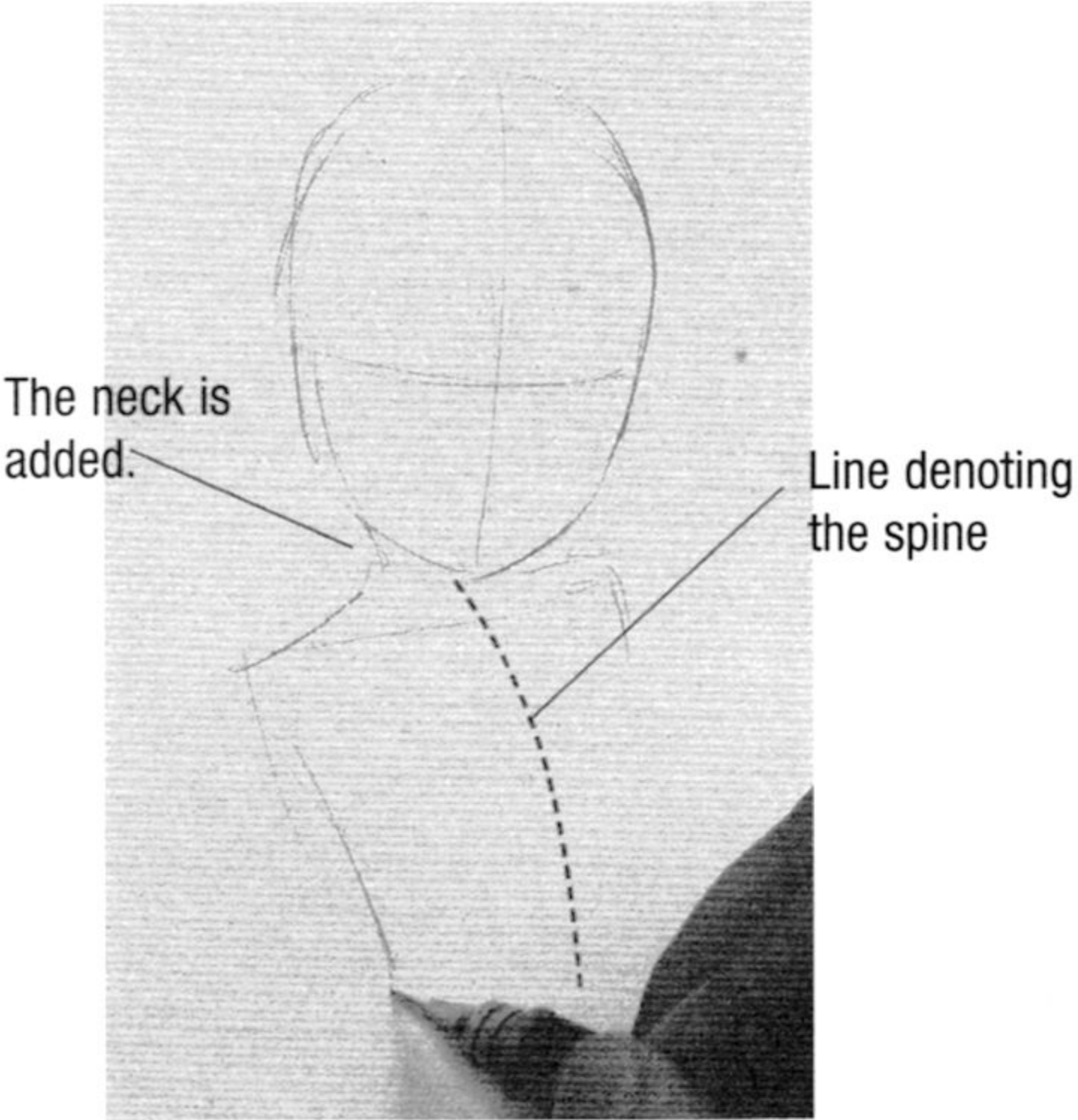


Reinforce the face's contours to finish.



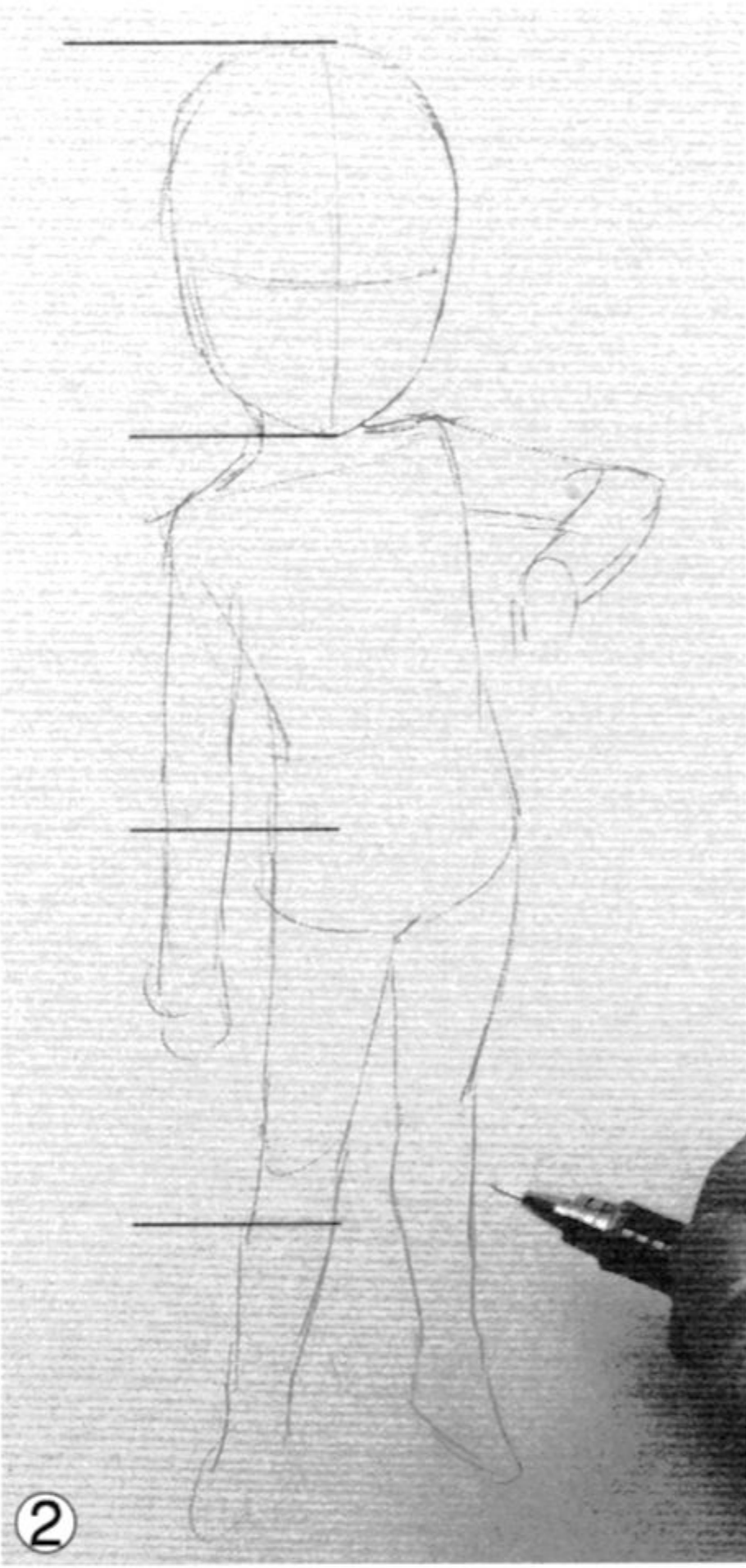
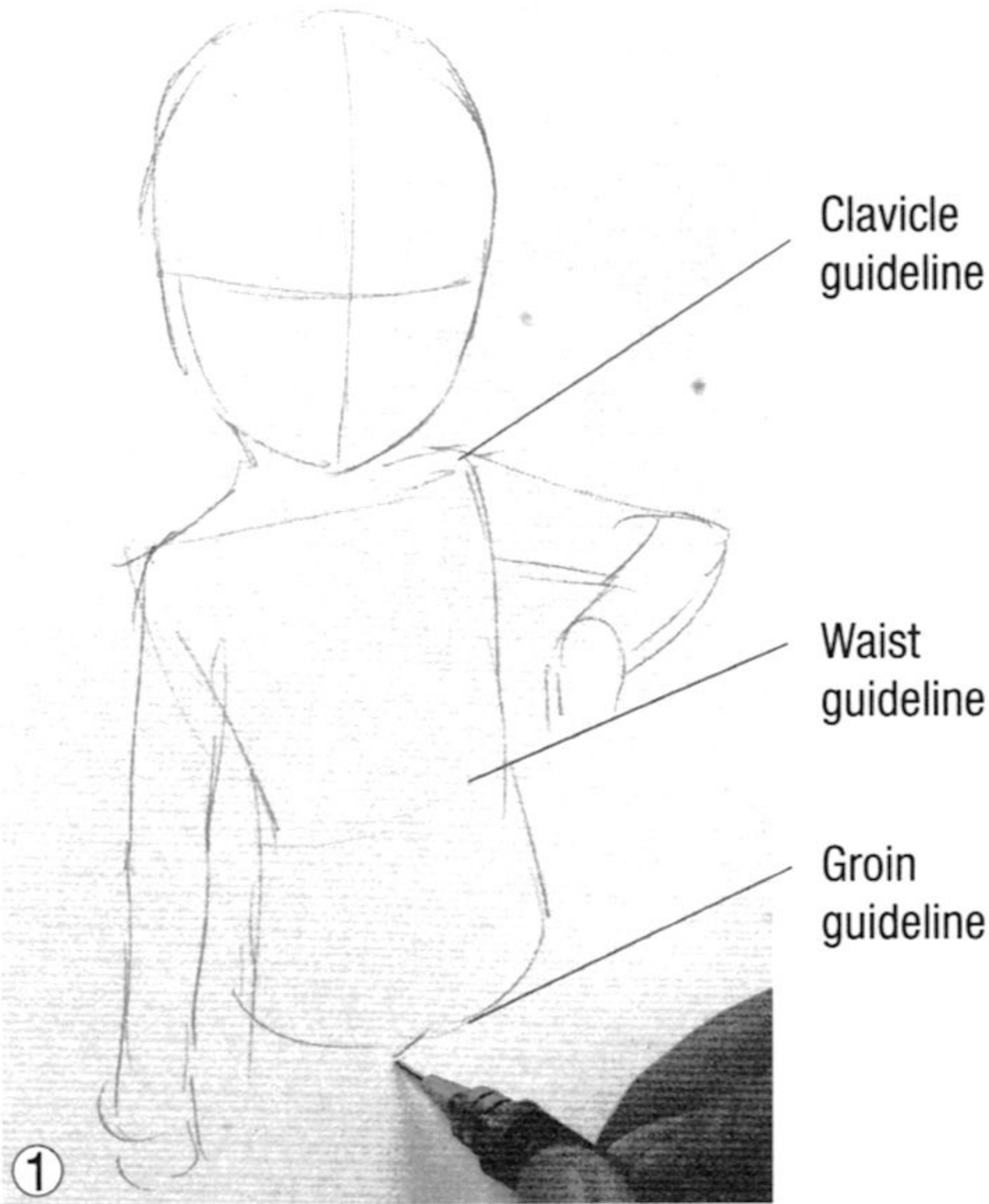
Character Wearing a (School) Regulation Swimsuit: 1:3.5 Head-to-Body Ratio

1. Sketching a Circle-and-X Layout and the Neck (Shoulder Width)



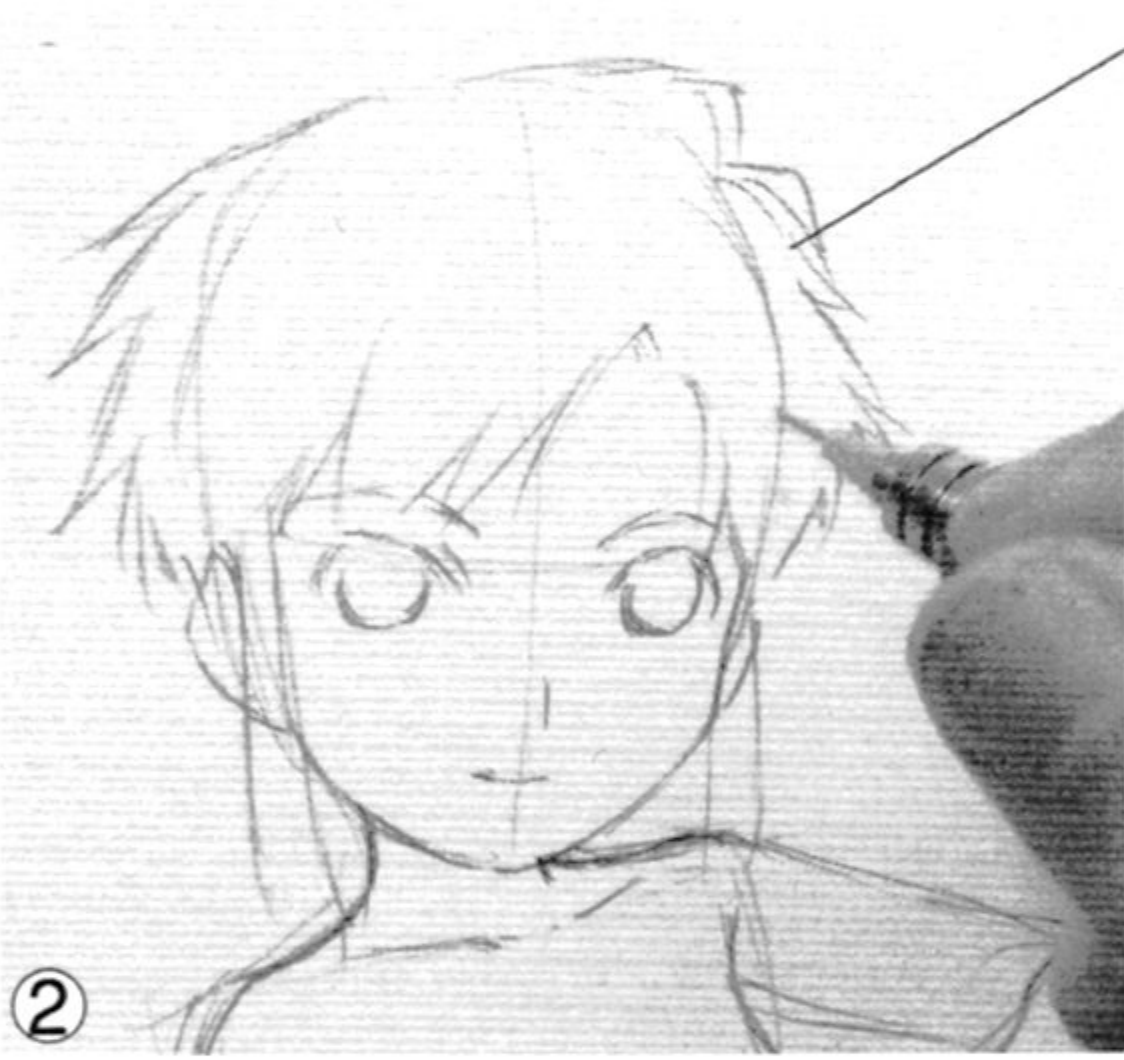
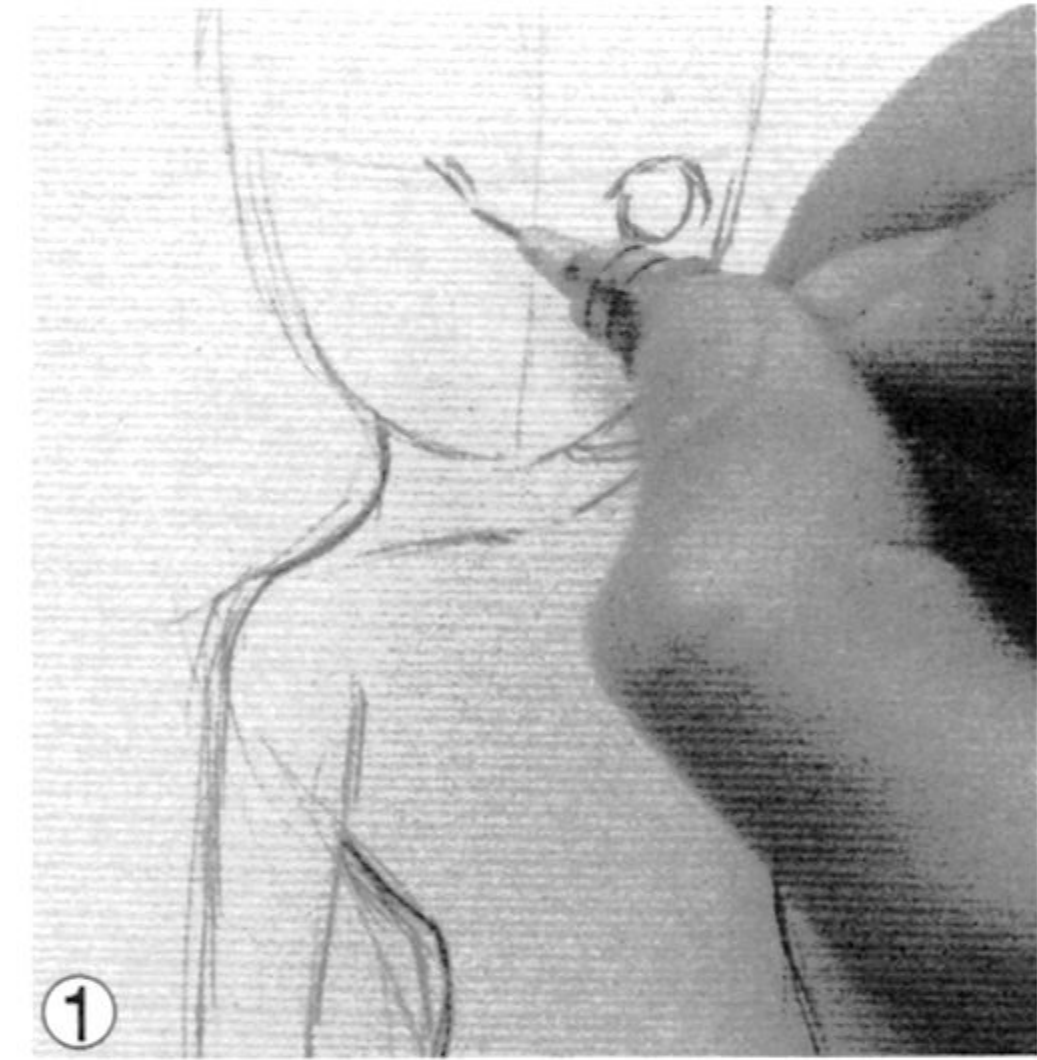
Morita sketches the body's layout while maintaining a visual image of the spine.

2. Full Figure Layout



The legs are on the short side, creating a girlishly adorable character.

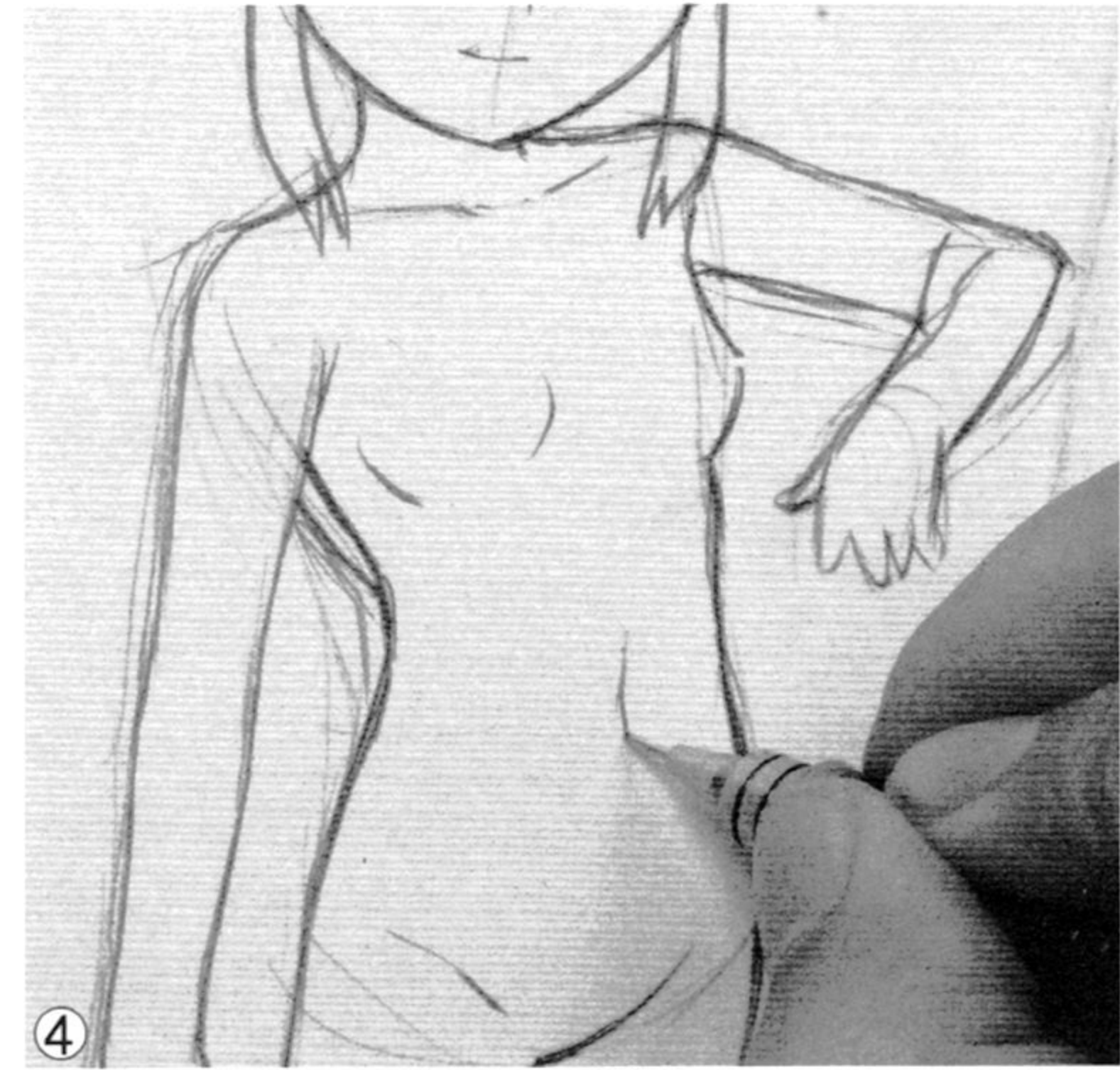
3. Head Layout: Adjusting the Contours



Morita gives the hair volume while maintaining awareness of where the head's exterior contours are located.



Morita draws the torso, the facial features, and the head's exterior contours in that order, gradually allowing the character to take shape.

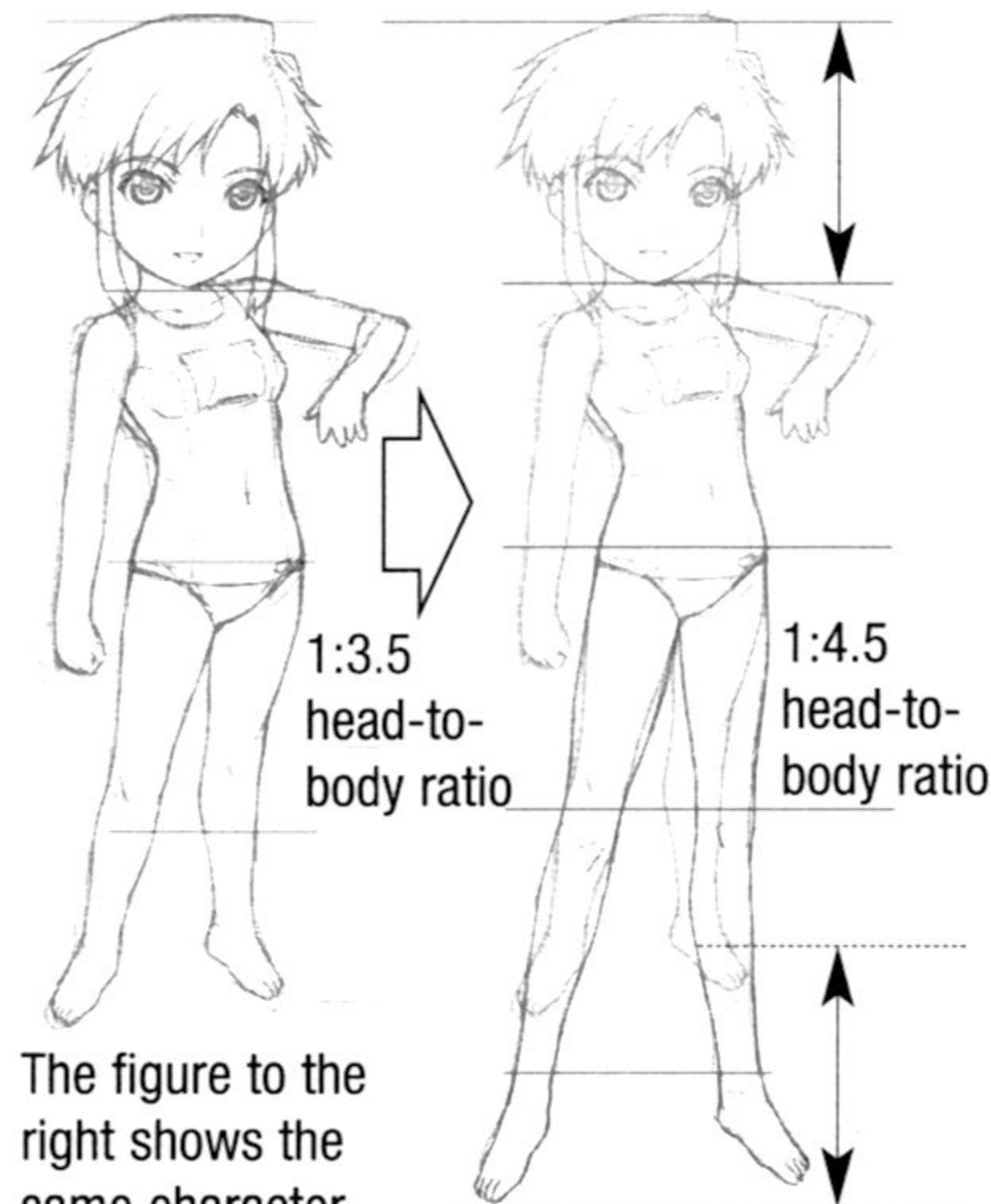


Morita completes the nude figure by adding a contour to define the belly.



Finally, Morita draws the swimsuit's contours and details. The garment fits snugly against the body, causing the nude sketch to become particularly critical. This is because the swimsuit's contours at the chest and hips must be used to give the figure a sense of volume.

4. Final Image



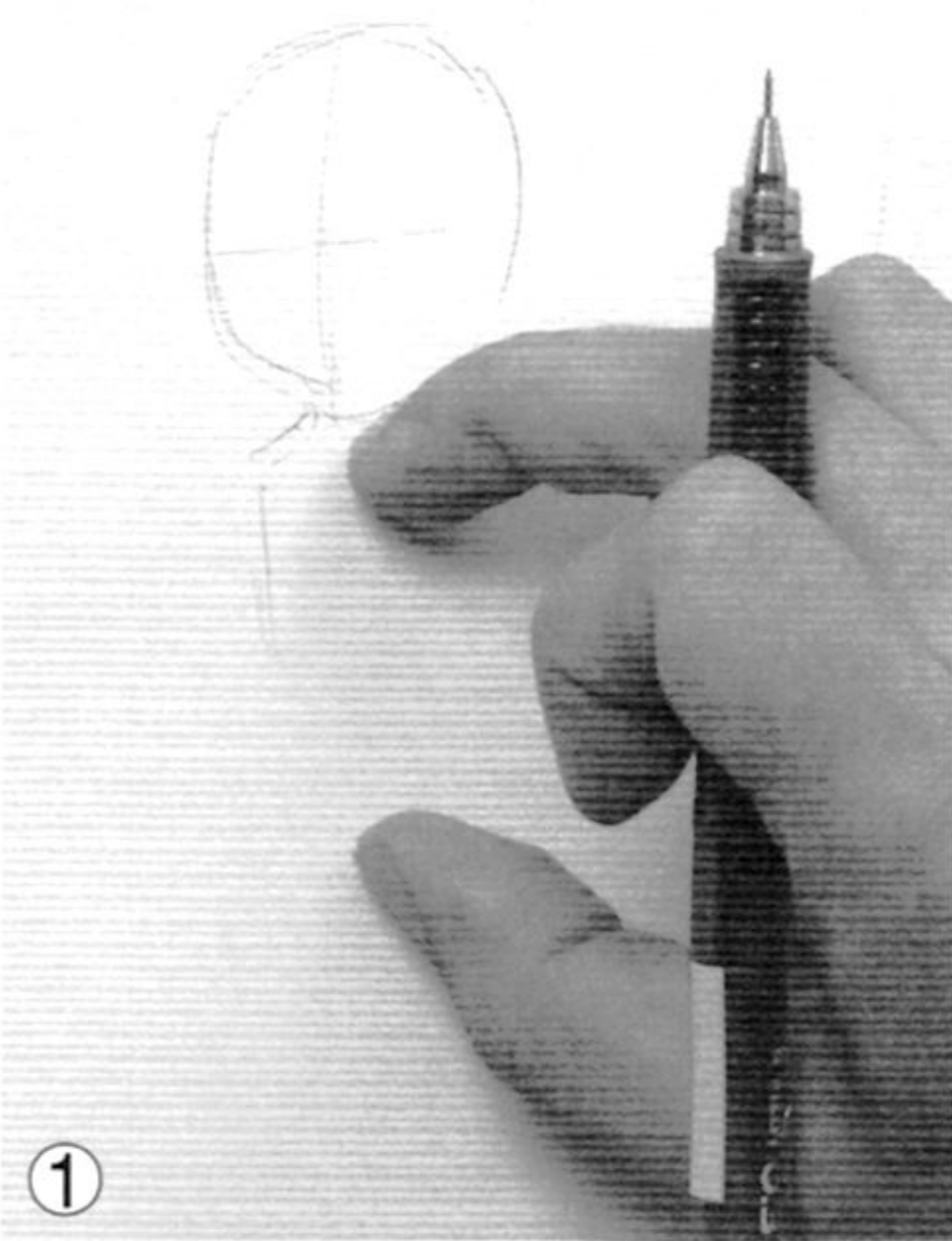
The figure to the right shows the same character with longer legs.

The head-to-body ratio may be modified.

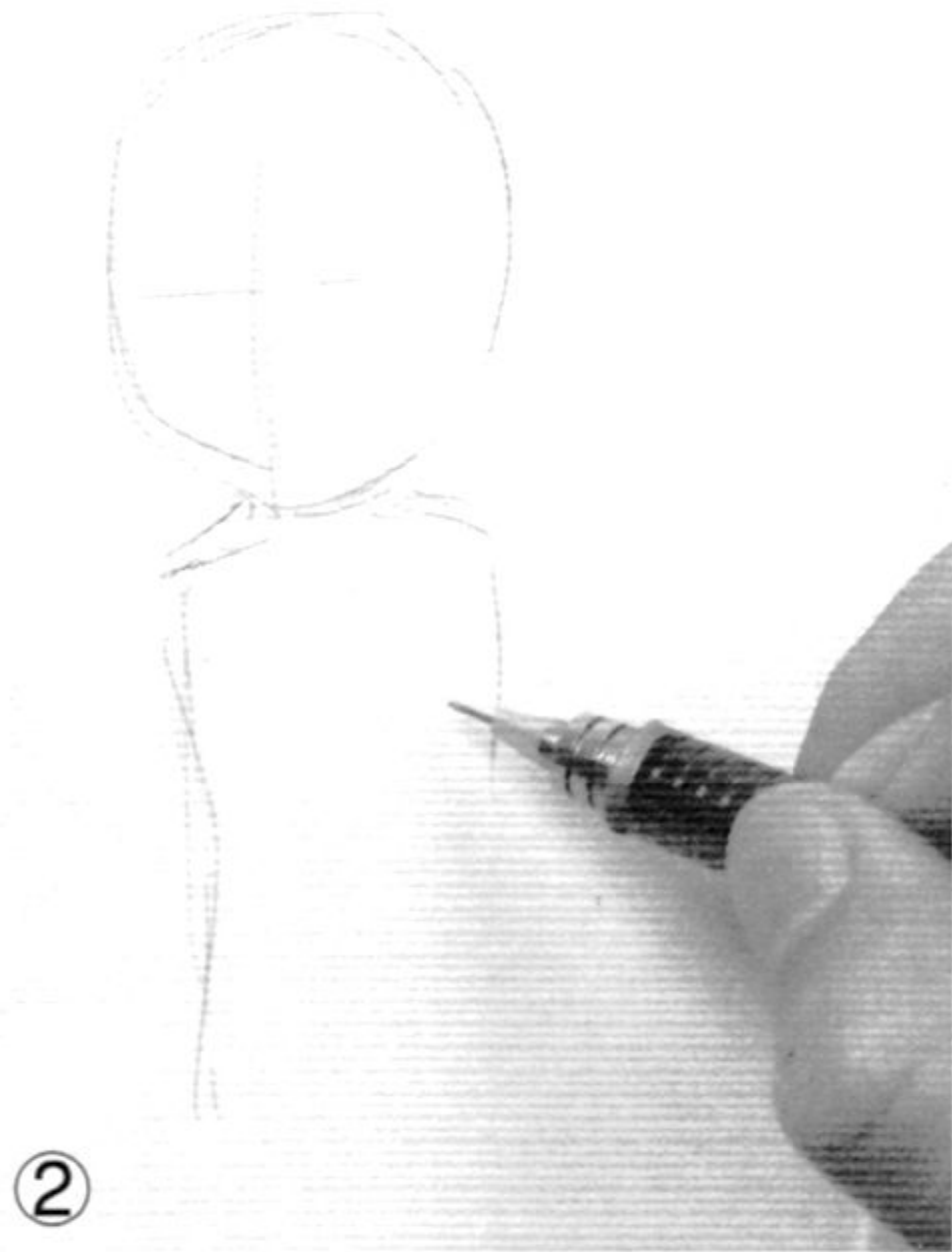


Drawing a Character Wearing a Sailor Suit: 1:4 Head-to-Body Ratio

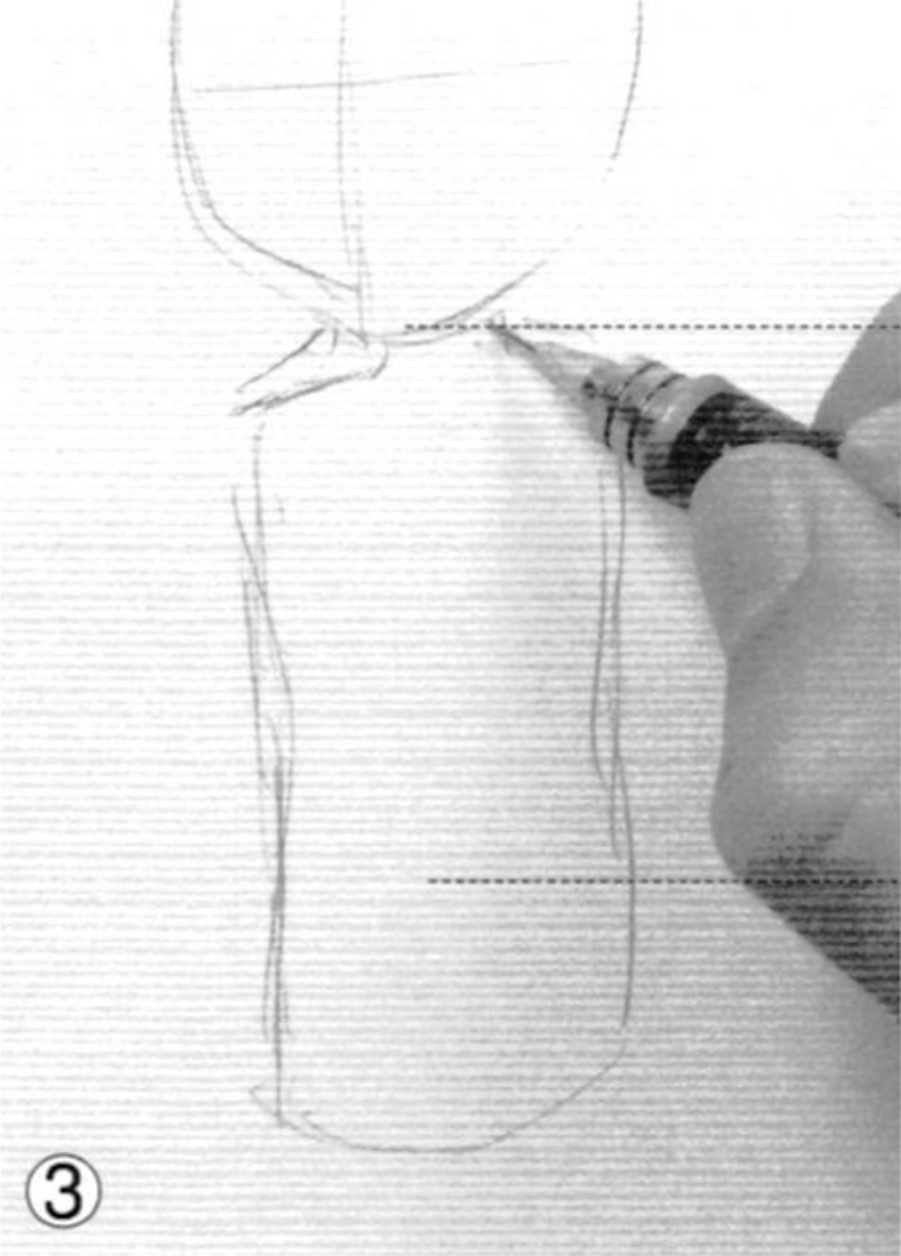
1. Sketching a Circle-and-X Layout and the Neck (Shoulder Width)



Morita draws the circle-and-x layout. One effective technique Morita demonstrates in this figure is using his fingers to gauge the positions of the waist and groin.



Next, Morita sketches the torso's layout.

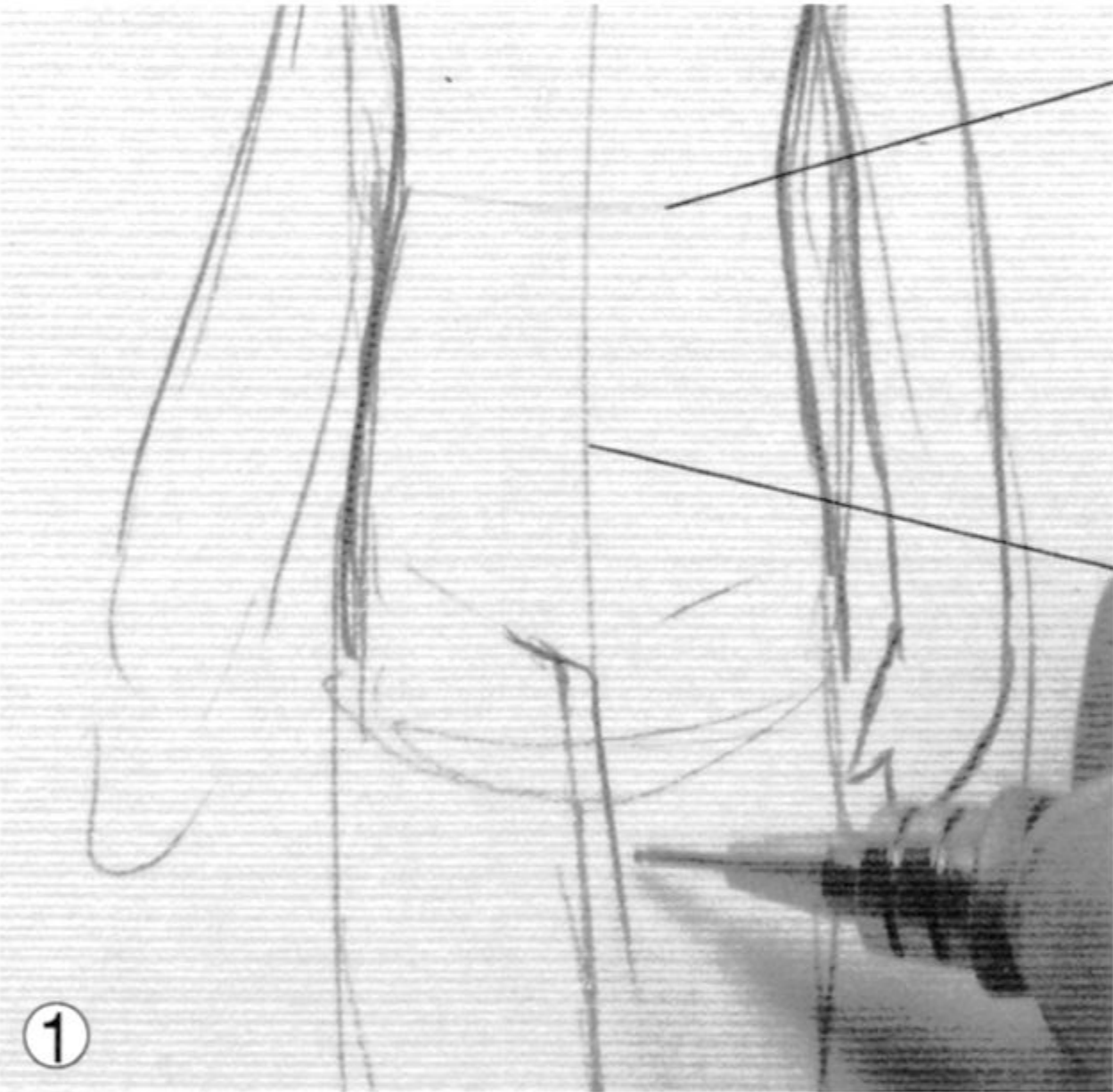


Here, Morita continues sketching the torso, while showing consideration to the neck.

This marks where the groin would normally be positioned on a 1:4 head-to-body ratio character. As you can see looking at the figure, Morita drew the torso on the long side in the layout.

The lower the groin is positioned from this level, the longer the torso will become proportionally, resulting in a short-legged character. The higher the groin is shifted above this level, the longer-legged the character will appear.

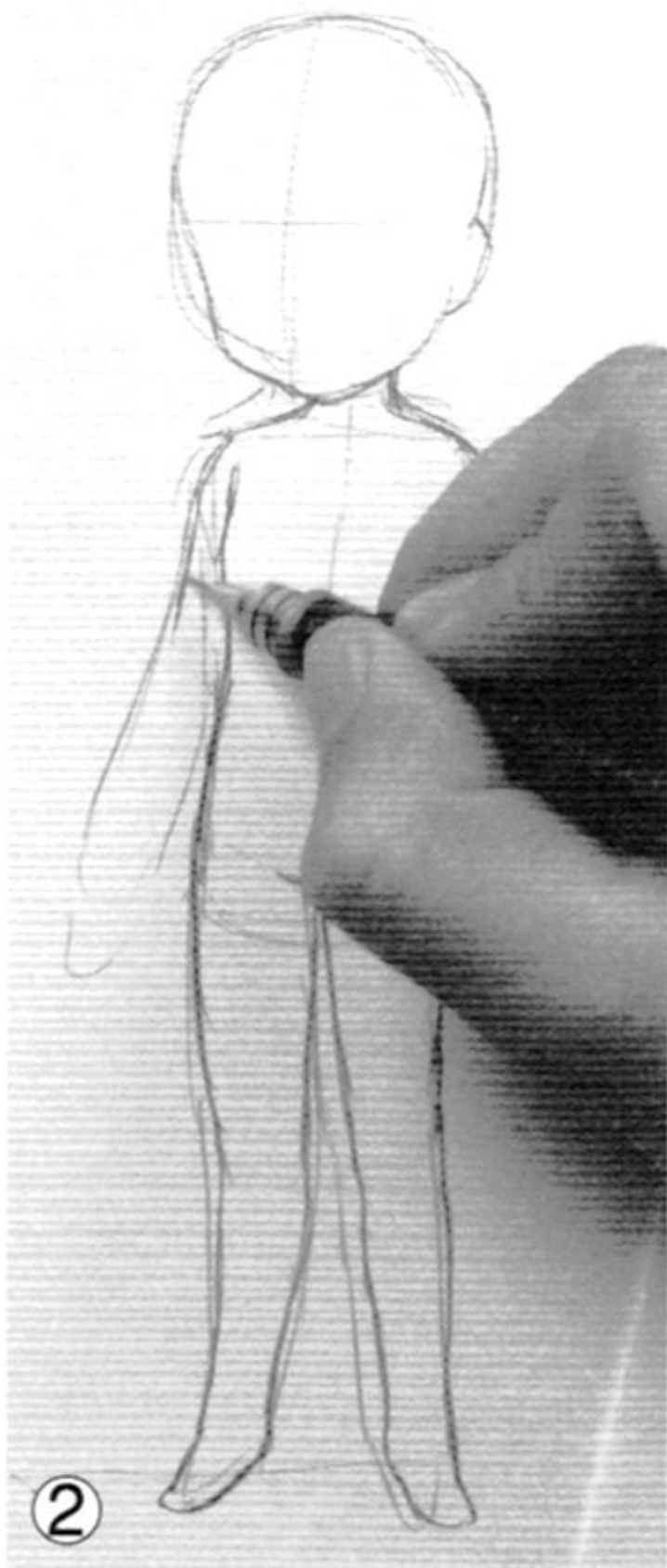
2. Sketching the Full Figure Layout and the Head Layout: Adjusting Contours



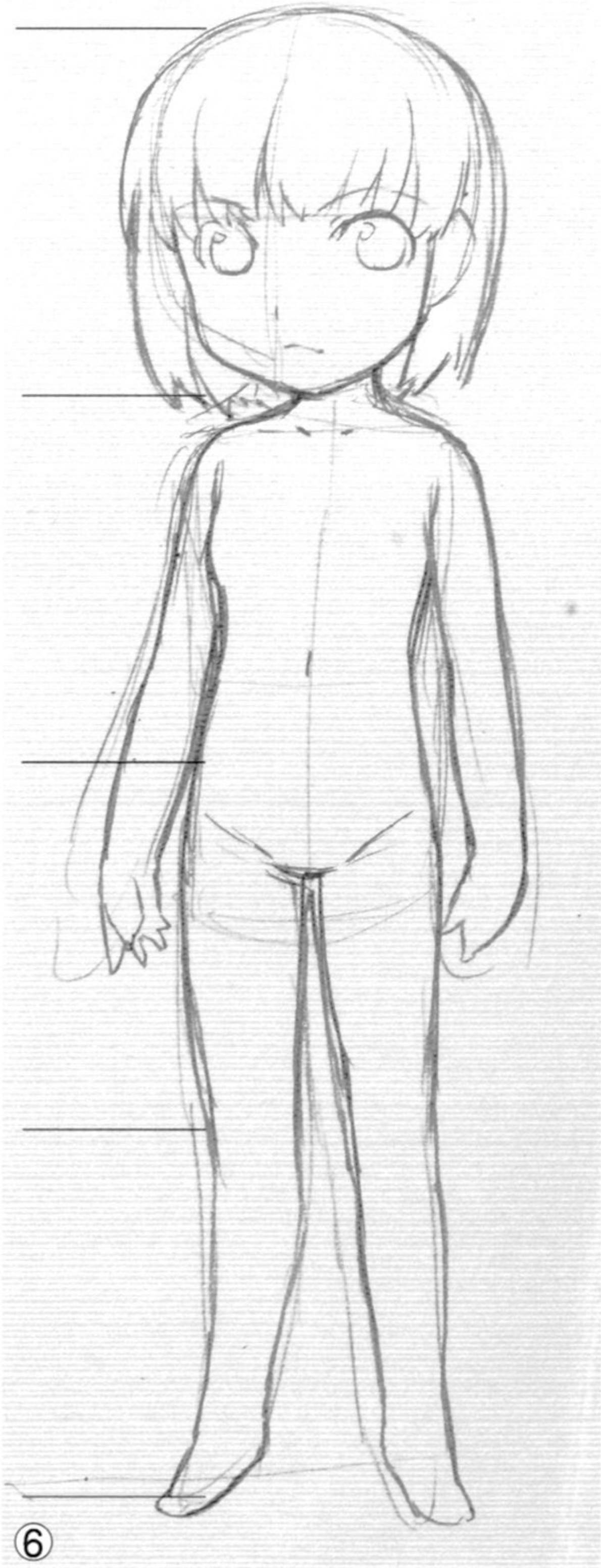
Waist guideline

Centerline guide

Morita determines where to position the groin while adjusting the torso's exterior contours. He draws the legs and adds a line to denote the figure's center or axial line.



At this stage, Morita cleans up and adjusts the shape of the arms, which were previously simple poles.



The above shows a completed contour drawing of the character nude. Producing a carefully rendered nude sketch of the character before dressing her is a key requirement if you intend to dress the character successfully.

3. Drawing the Clothes



Use the centerline as a guide for drawing the blouse's front closure.

Centerline guide

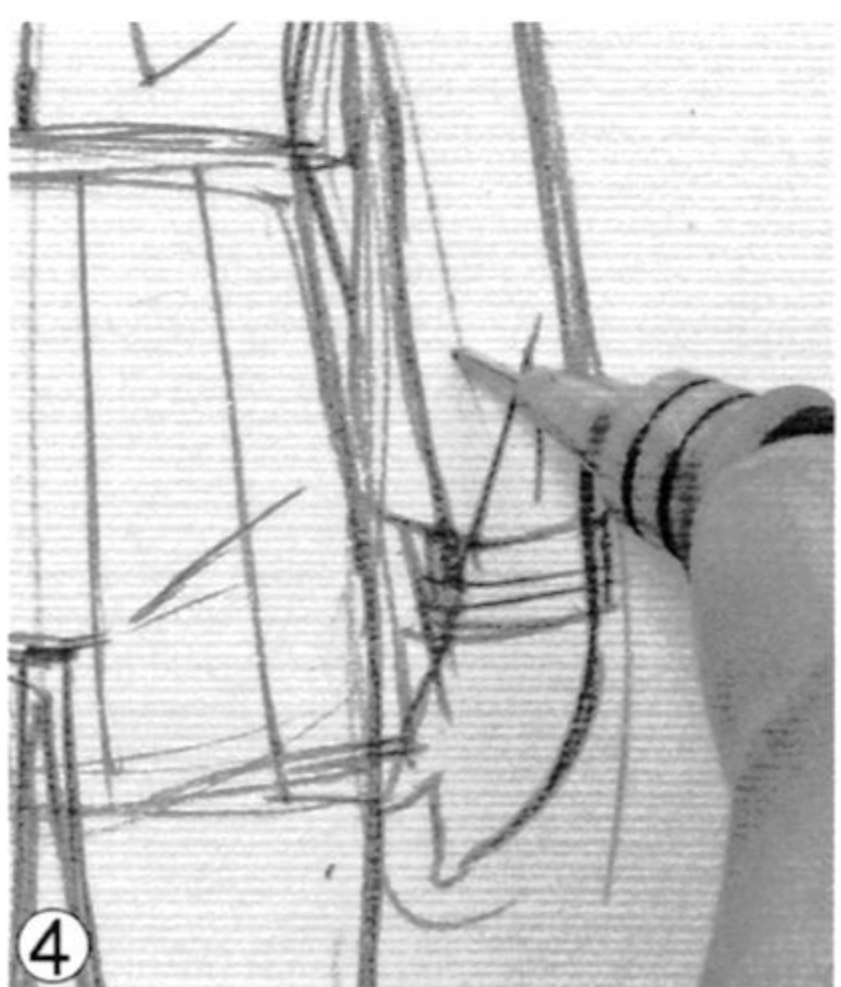


Here, Morita draws layouts for the sleeves and the rest of the clothing. Drawing a cropped, middy blouse gives the sailor suit a stylish look.



Once Morita adds the bow, he has finished the upper body clothing. The garments sit on top of the body, so they must be drawn following the figure's contours but leaving a gap between the body and the clothing's silhouette contours.

Morita adds a guideline for the skirt's hem.

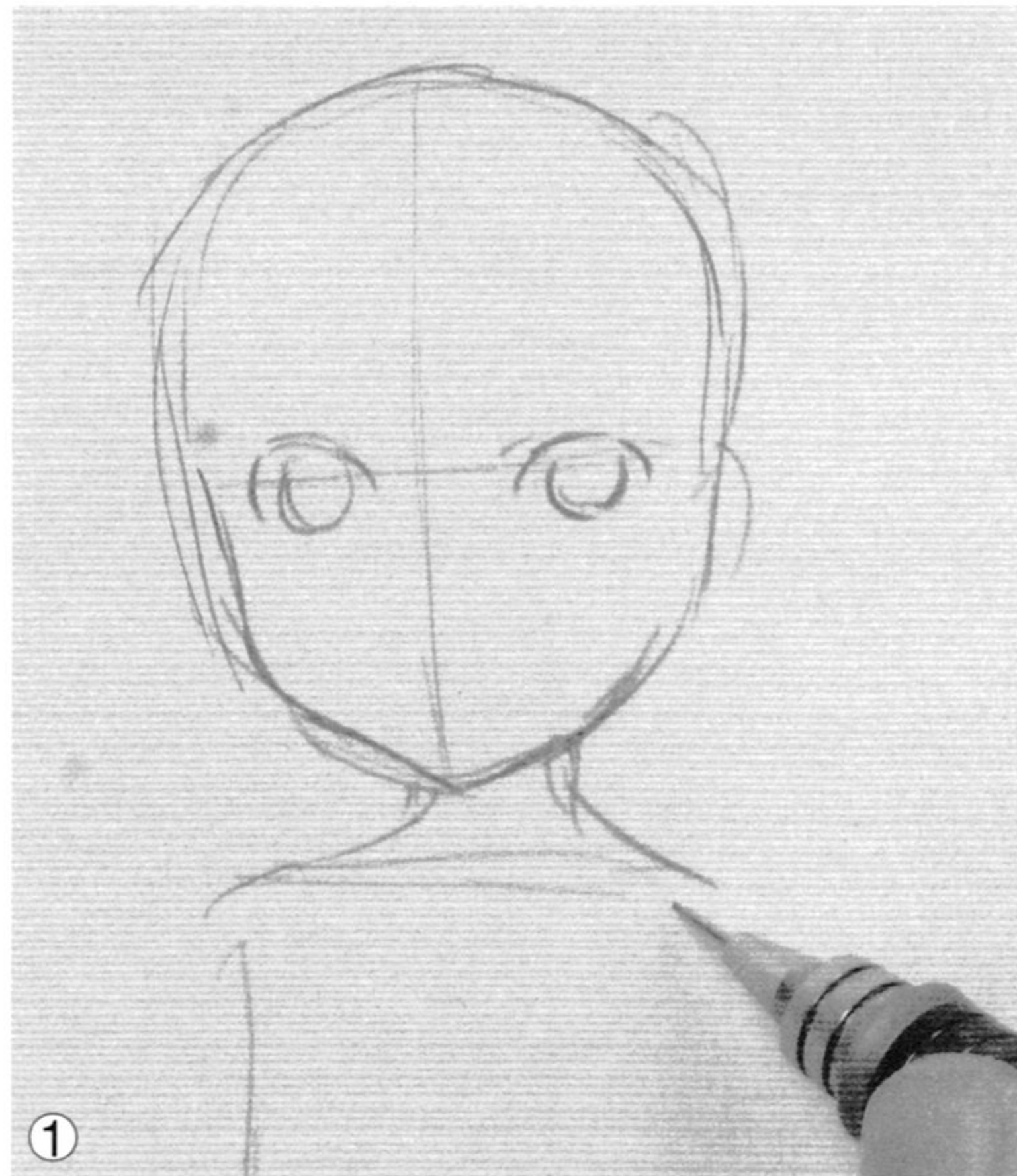
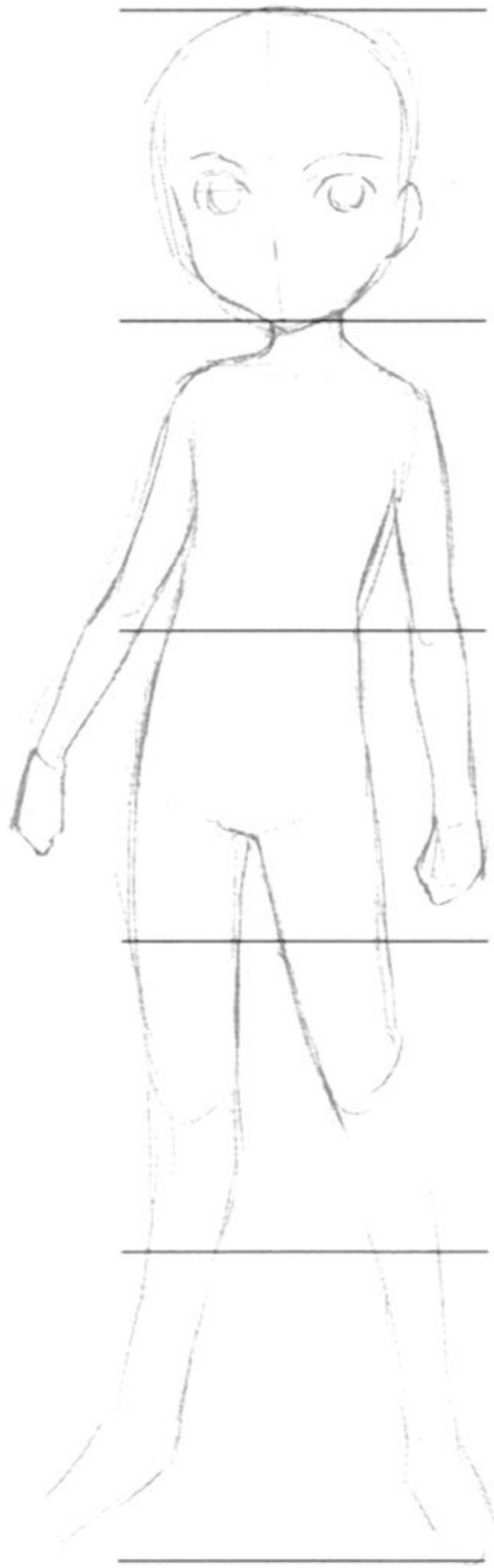


Finally, Morita draws the skirt's contours and ripples in the sleeves to finish the drawing.



1:5 Head-to-Body Ratio Study Sketches

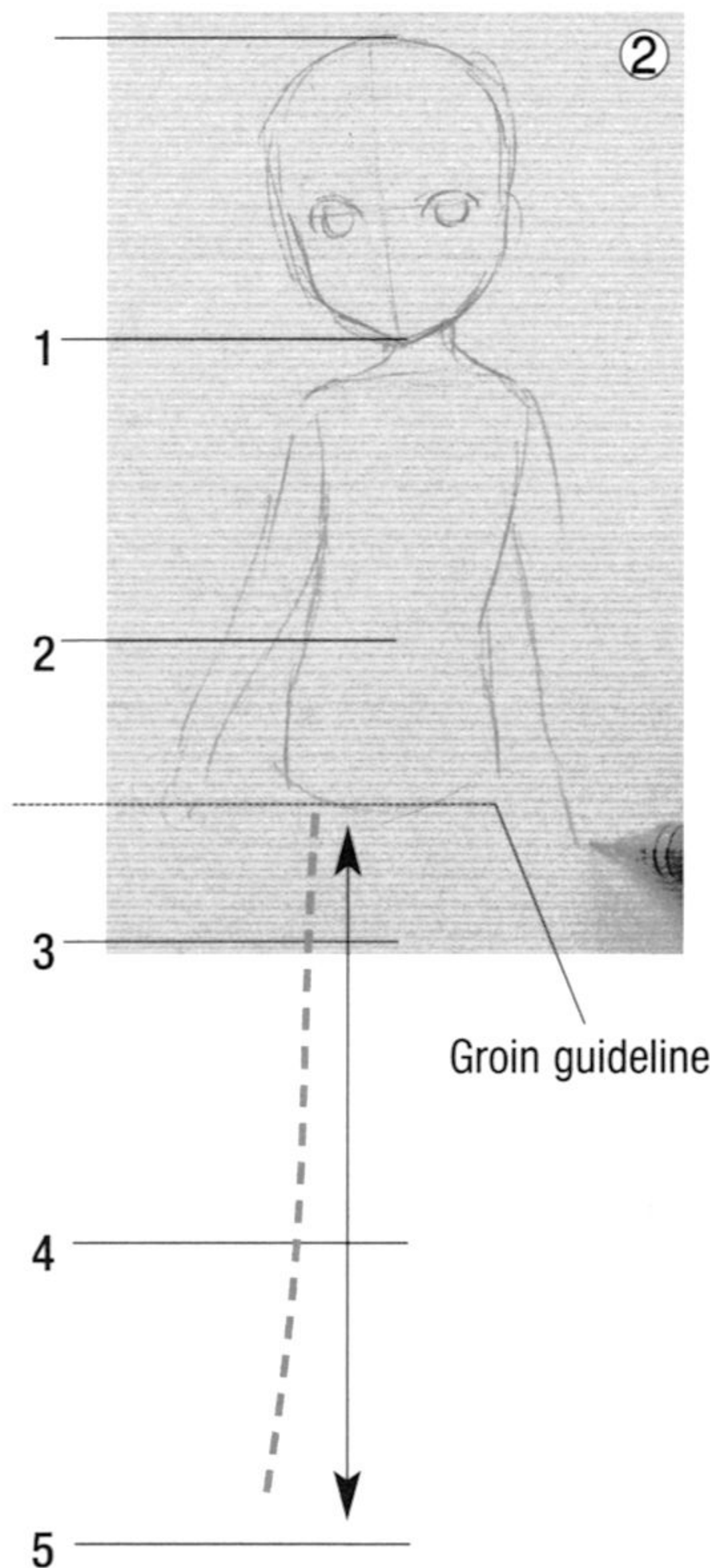
The neck plays a key role in the impression the figure's head-to-body ratio projects. A 1:5 head-to-body ratio seems to be the point at which the impression the figure projects changes depending on whether it is above or below this ratio. Consequently, even a professional artist must have built up skill and experience to determine the desired image. Artists find sketching studies of the kind shown on these pages useful to improving their skills.



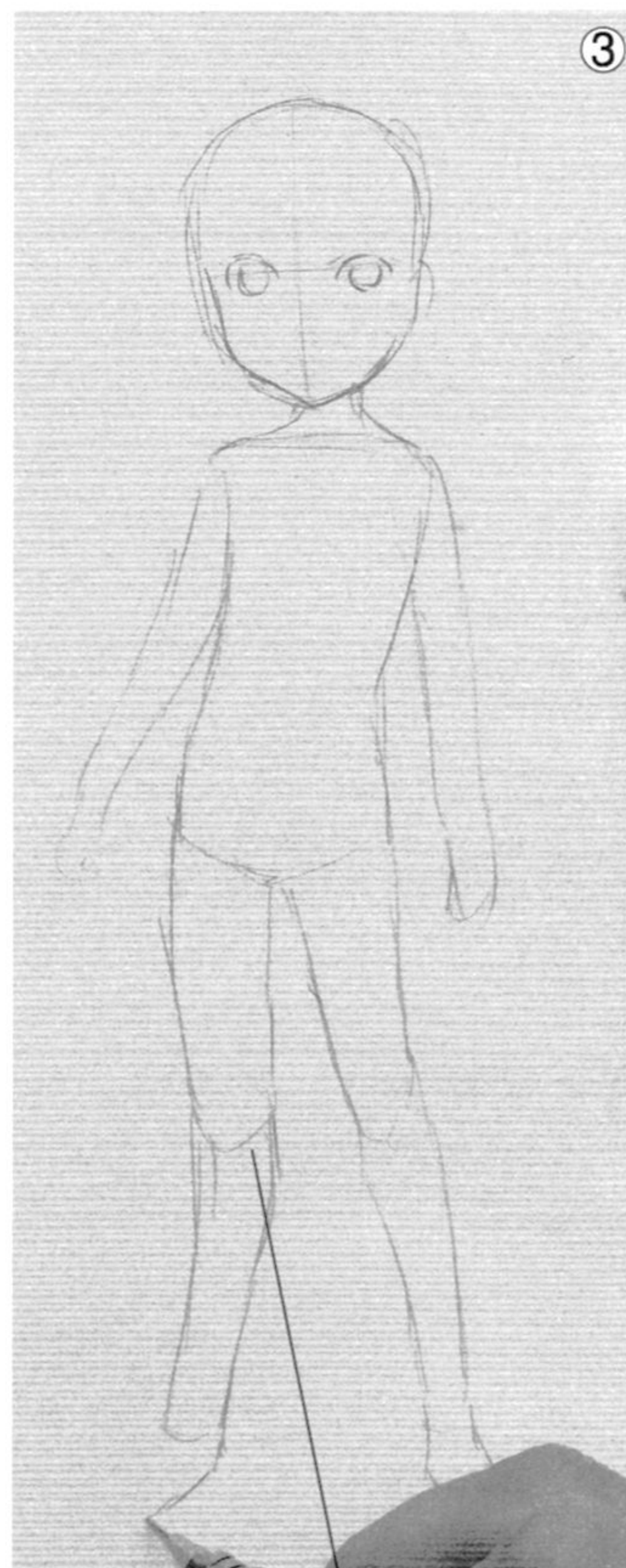
In the above, Morita sketches a circle-and-X layout. Unlike the *chibi* (a.k.a. "super-deformed" or "ultra-stylized" character), this character has been given a slender neck.



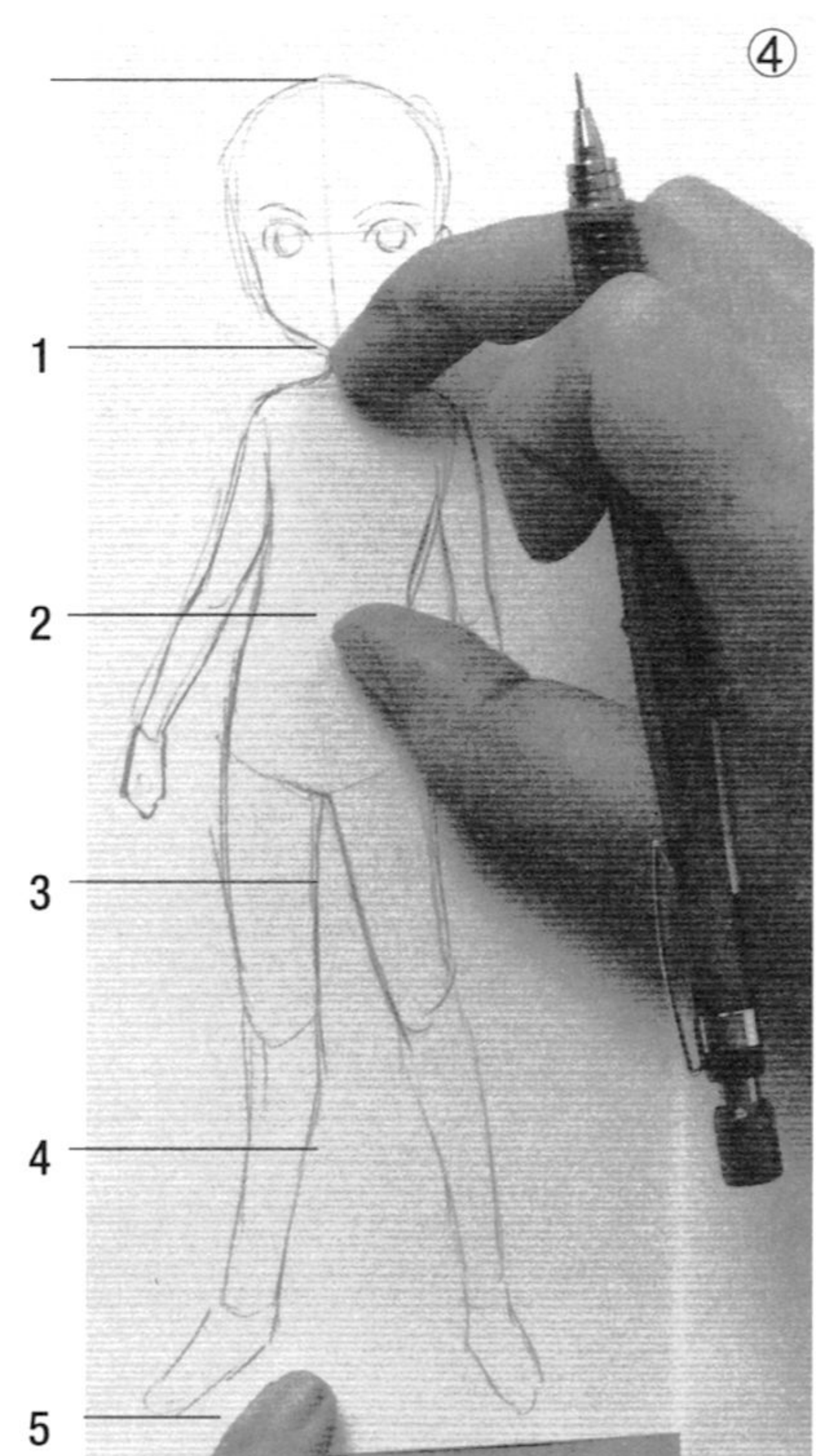
Note how the previously drawn 1:3 head-to-body ratio had virtually no neck.



When composing a figure, the groin should be positioned halfway down the full height. Therefore, in a 1:5 head-to-body ratio character, the groin would be positioned at a height of 2.5 heads. Once you have grown accustomed to proportioning a character, you will find yourself naturally positioning the groin at the correct position to match the proportions desired.



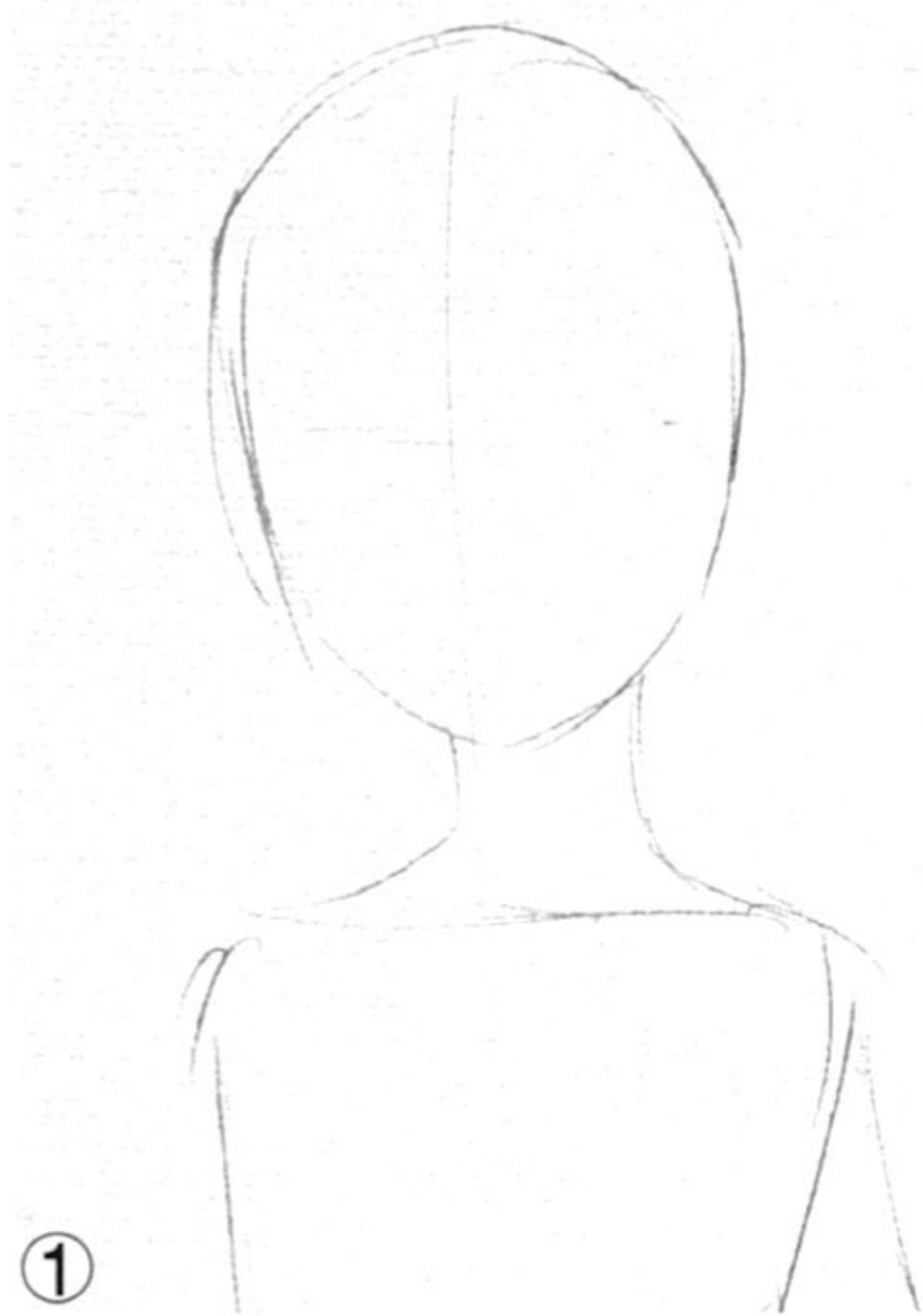
Morita sketches guidelines for the knees while drawing the legs.



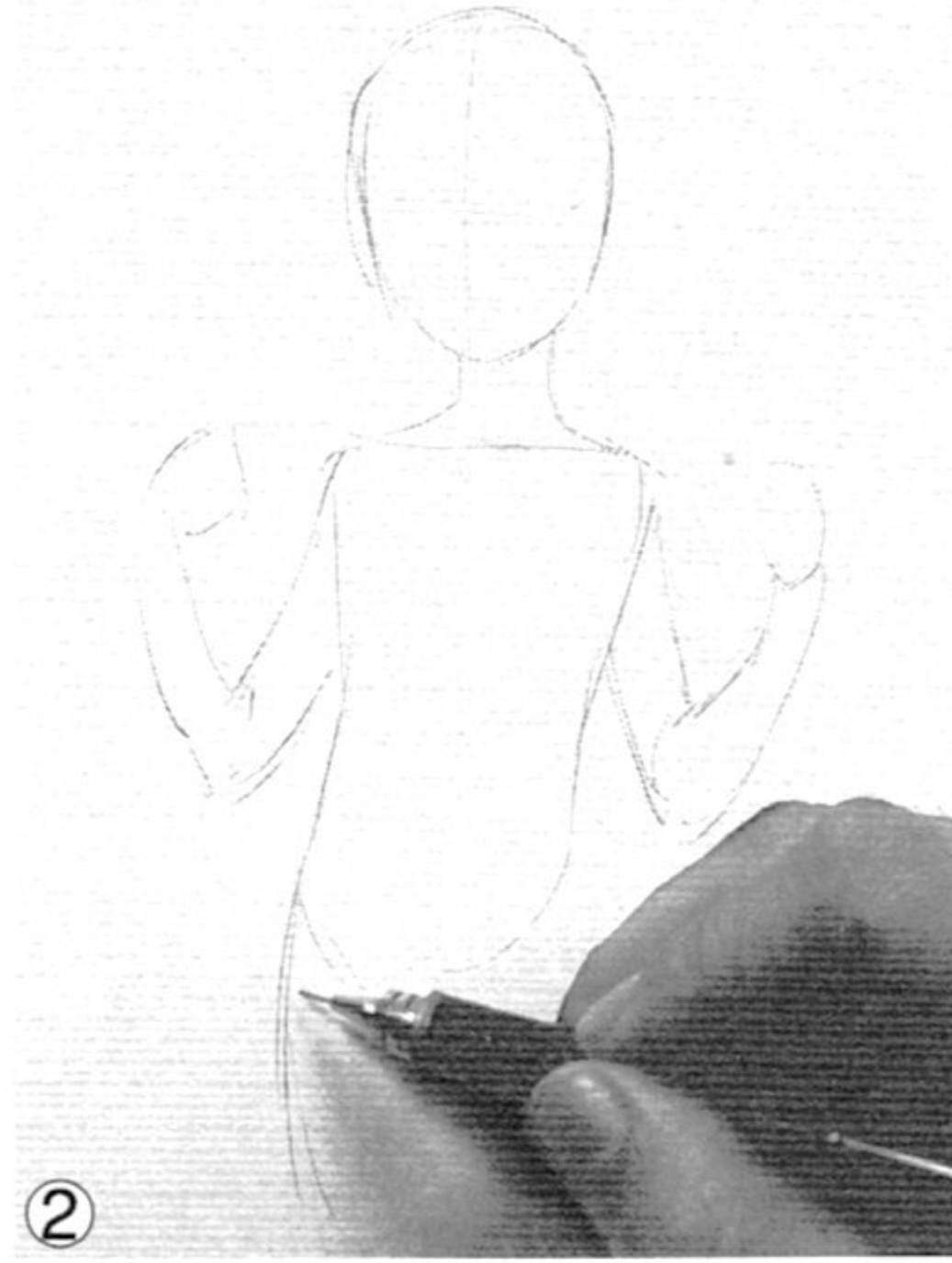
The above shows Morita again using his fingers to check the head-to-body distances. A 1:5 head-to-body ratio is commonly used for male and female characters in their teens.

Drawing a Character Wearing a Jersey Top and Jeans: 1:5 Head-to-Body Ratio

1. Steps in Sketching from a Circle-and-X Layout and the Neck (Shoulder Width) to a Full-Figure Layout



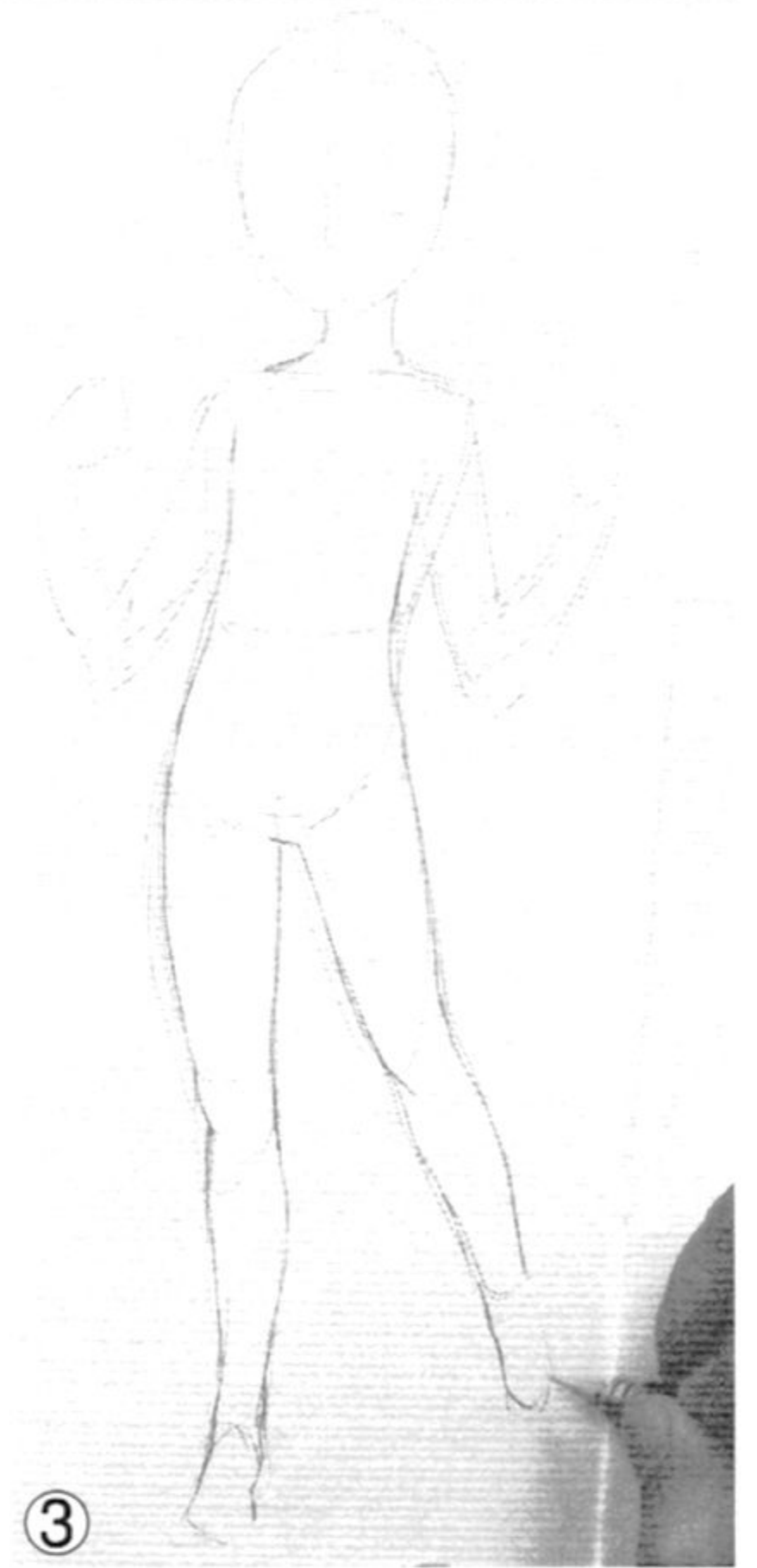
① Morita intends to draw a mature-looking character at a 1:5 head-to-body ratio, so he made the neck longish.



② Imagine the spine follows an S-curve when giving a character a sinuous pose. Take care when sketching the layout.

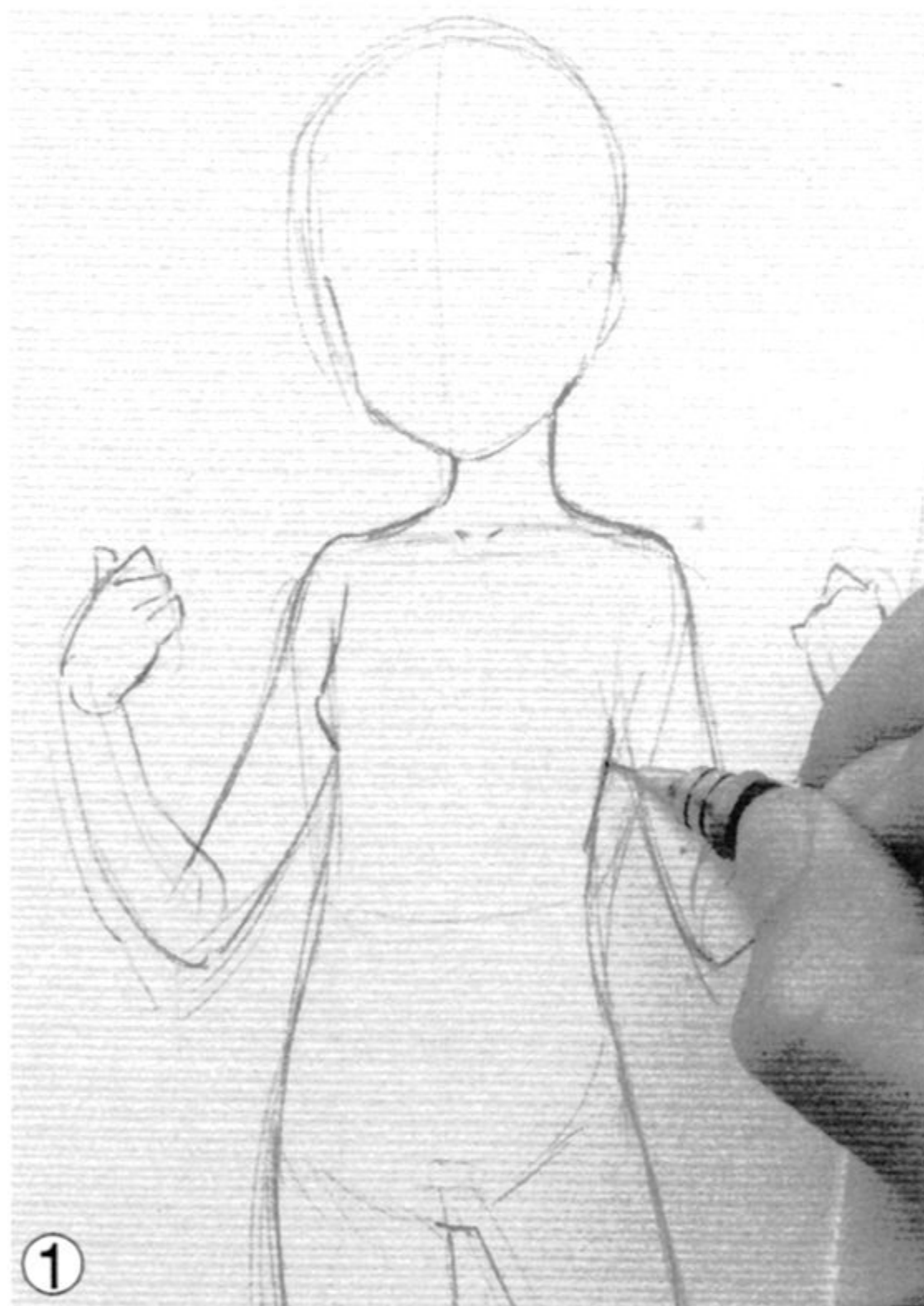


Once Morita has progressed to the point where he adds the groin guideline, he checks the proportioning.



③ The above shows a completed layout of the posed character.

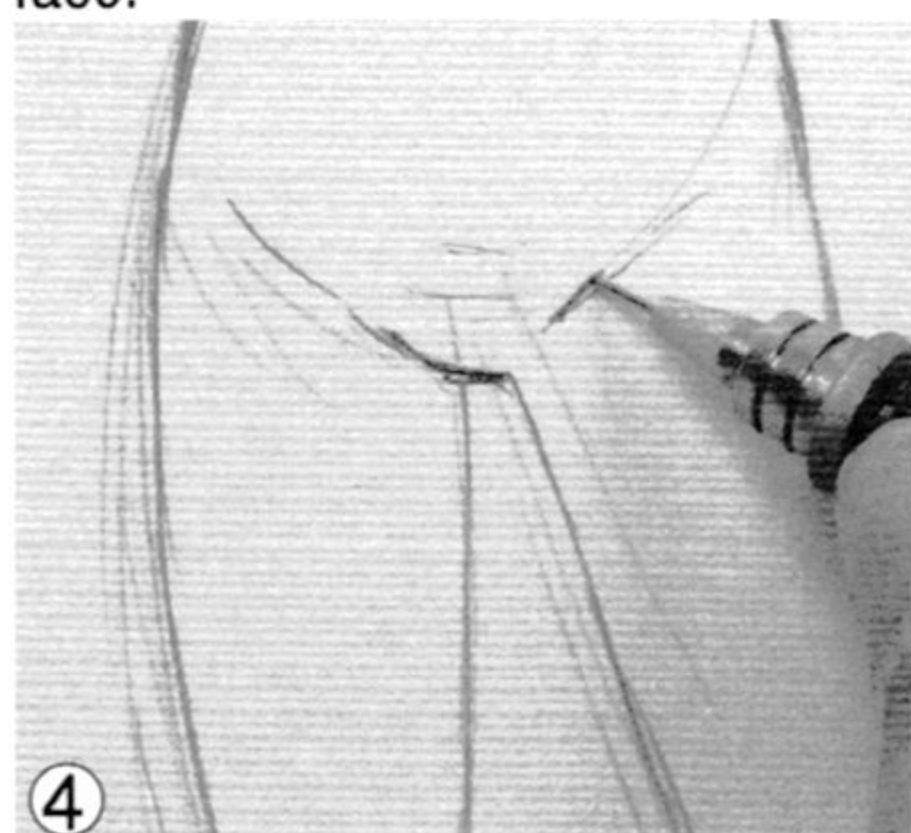
2. Sketching the Full Figure Layout and the Head Layout: Adjusting Contours



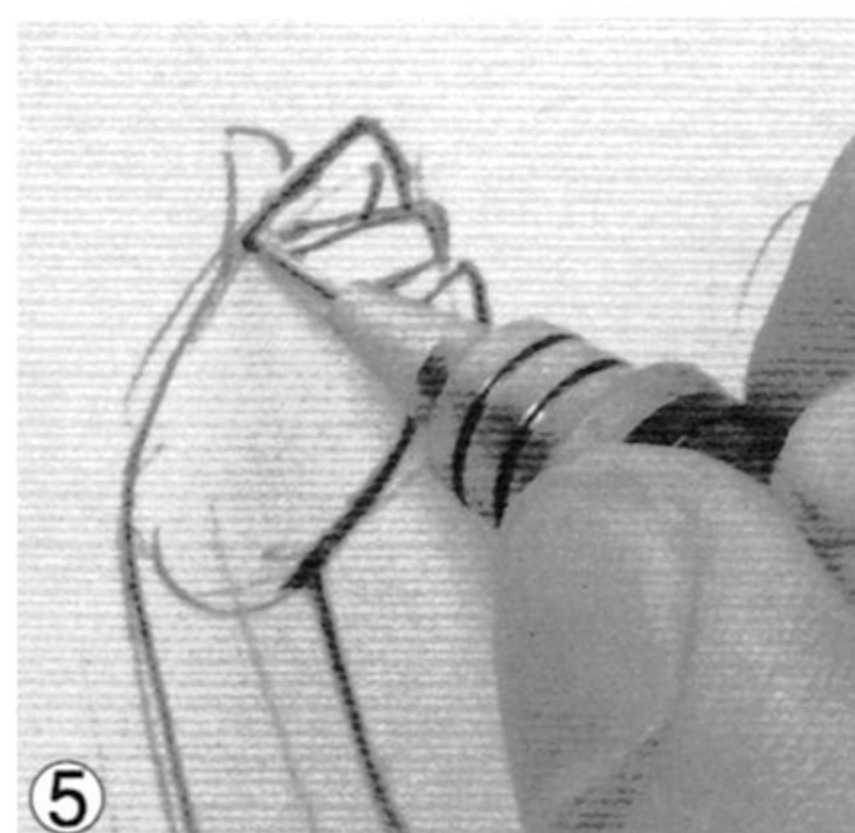
① How the character will appear in the final drawing has already been established by this point. In order to achieve a clear image of a character, first draw a layout sketch of the full figure rather than starting with the face.



③ Morita sketches a layout of the head (face and hair).



④ Where the groin is positioned constitutes the key point in the character's overall visual balance.



⑤ Next, Morita adjusts fingers' contours and other details.

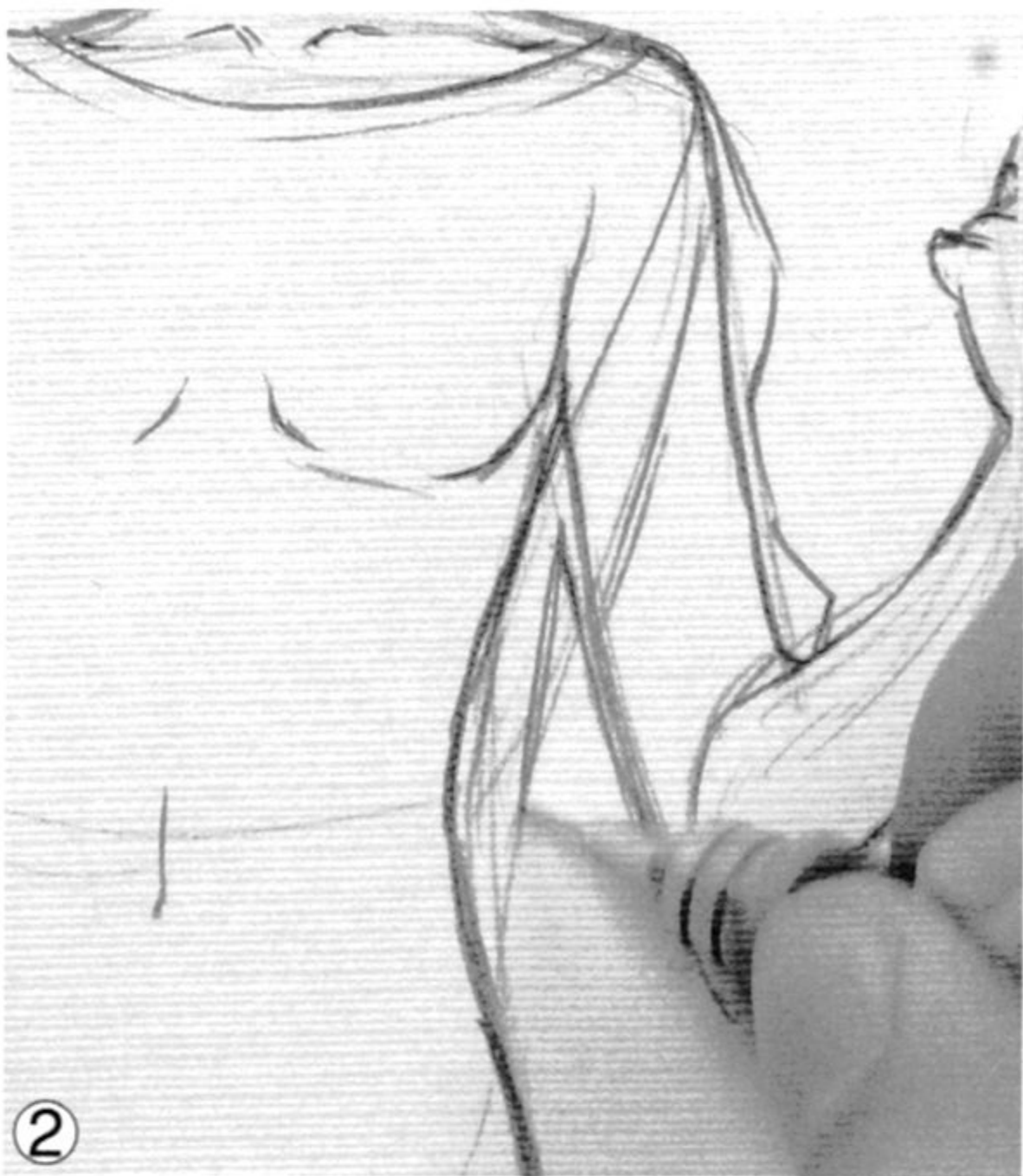


⑥ To finish the drawing, Morita draws the irises and pupils, the breasts, and other details. The nude sketch is now complete.

3. Drawing the Clothes



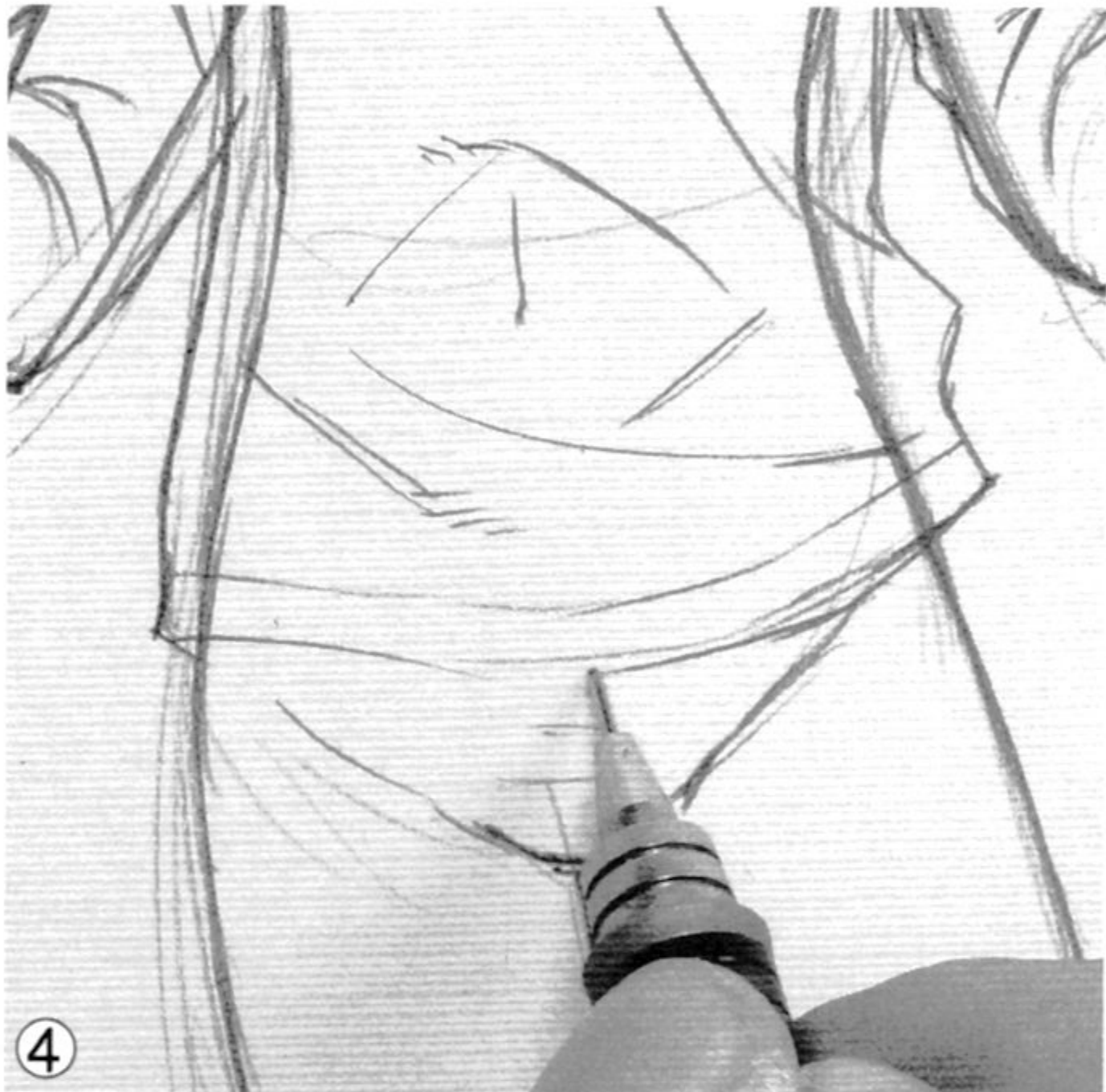
Work from top to bottom, starting with around the neck.



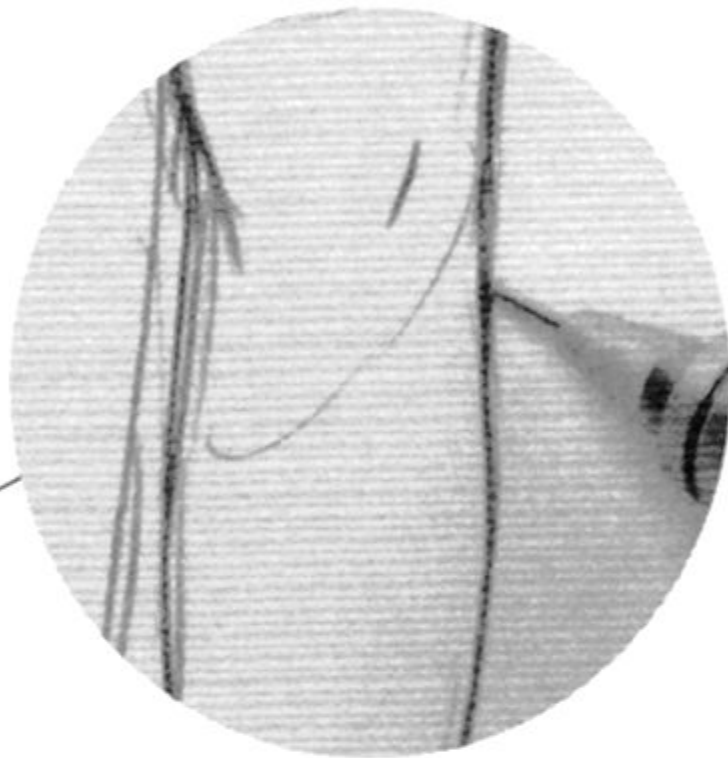
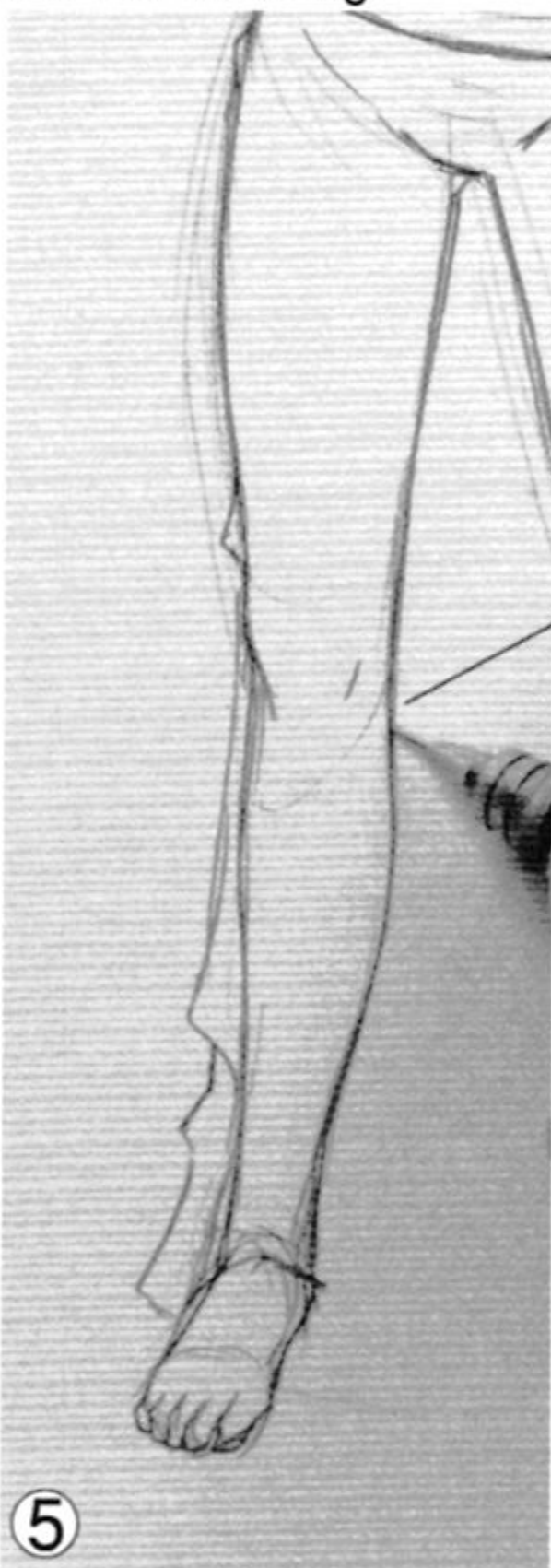
Leave a gap between the contours of the loose jersey and those of the flesh underneath. Layer your strokes, and note where the body's contours are while you draw the clothing.



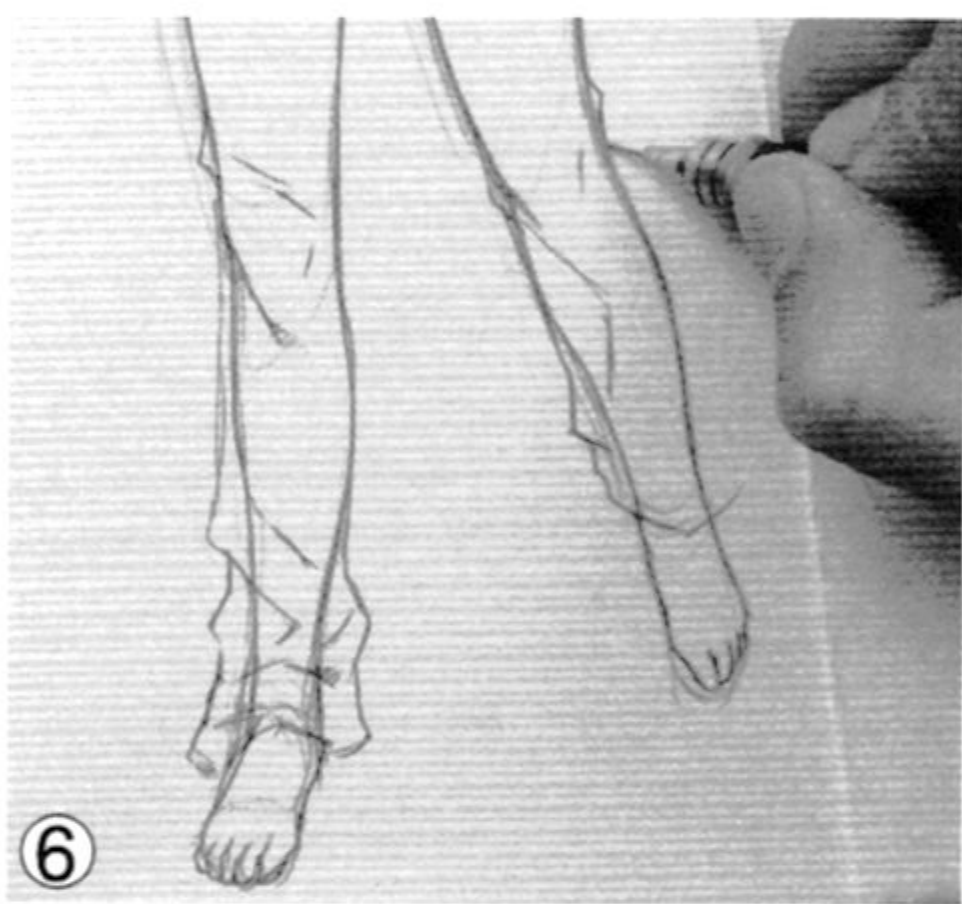
When drawing clothes as with drawing other things, it is common to start with the layout.



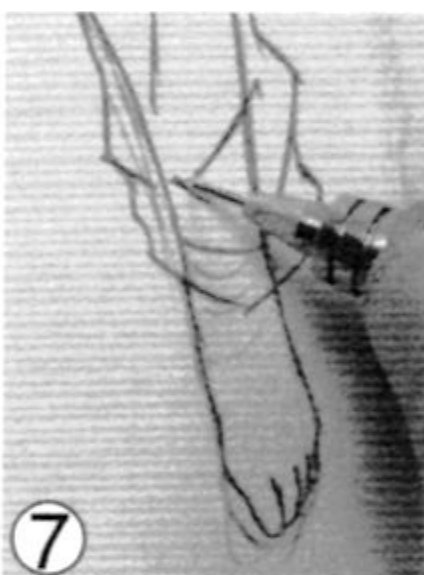
In this figure, Morita draws the ripples and creases on the jersey's front and adjusts the jersey's hemline.



Morita maintains awareness of the denim's thickness while carefully adding strokes.



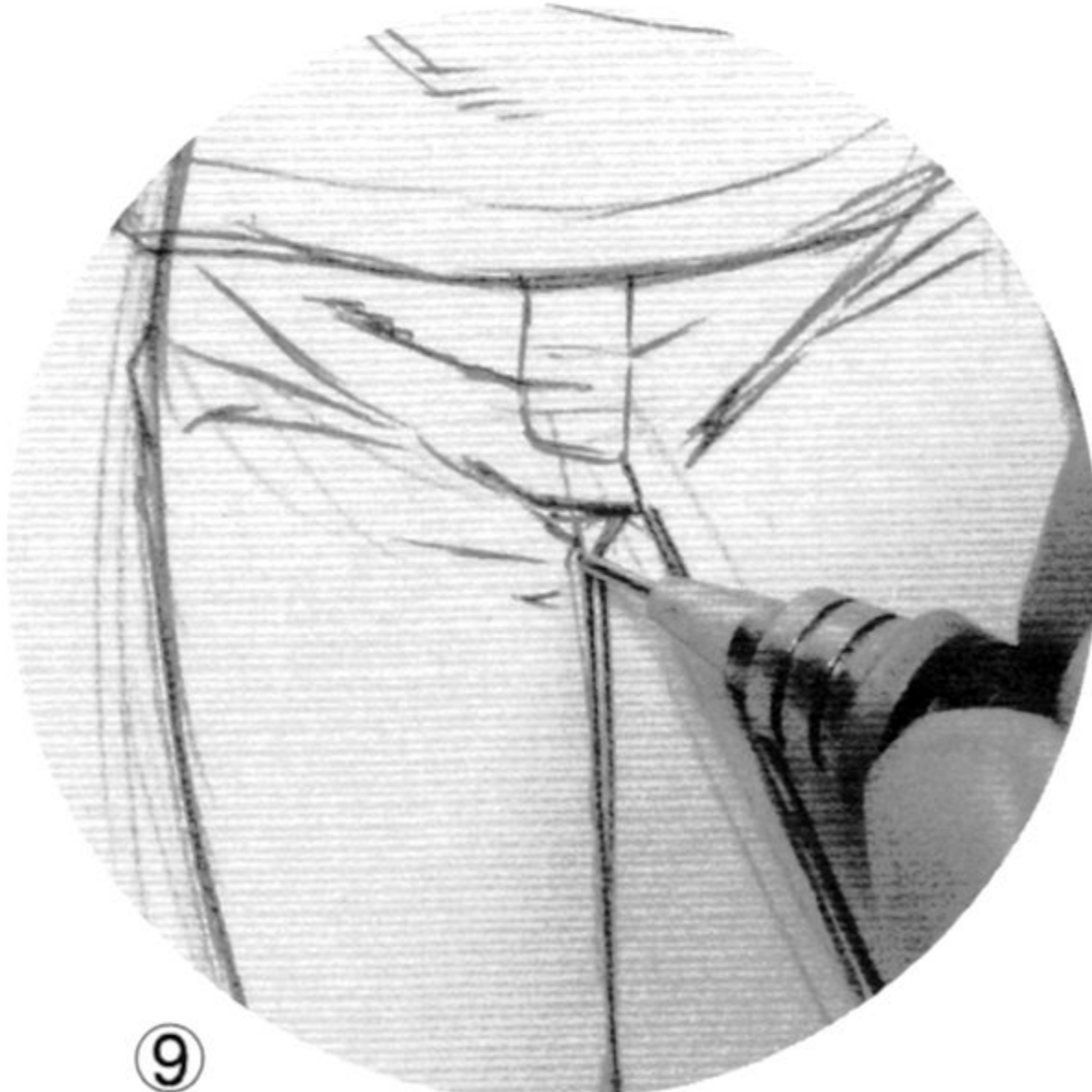
Morita draws the exterior contours of one jean leg and then the other.



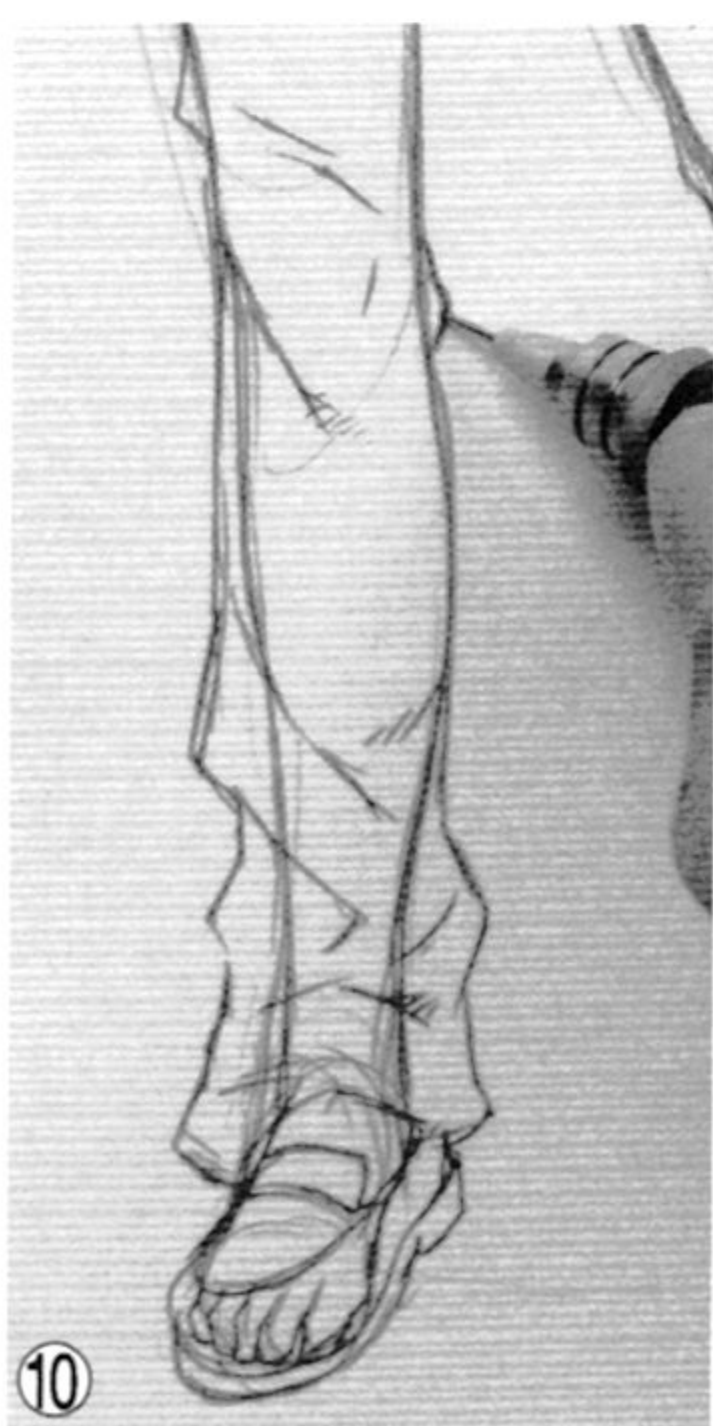
When drawing your own, add contours to define the rippling and bunching at the hem after having finished the jeans' exterior contours.



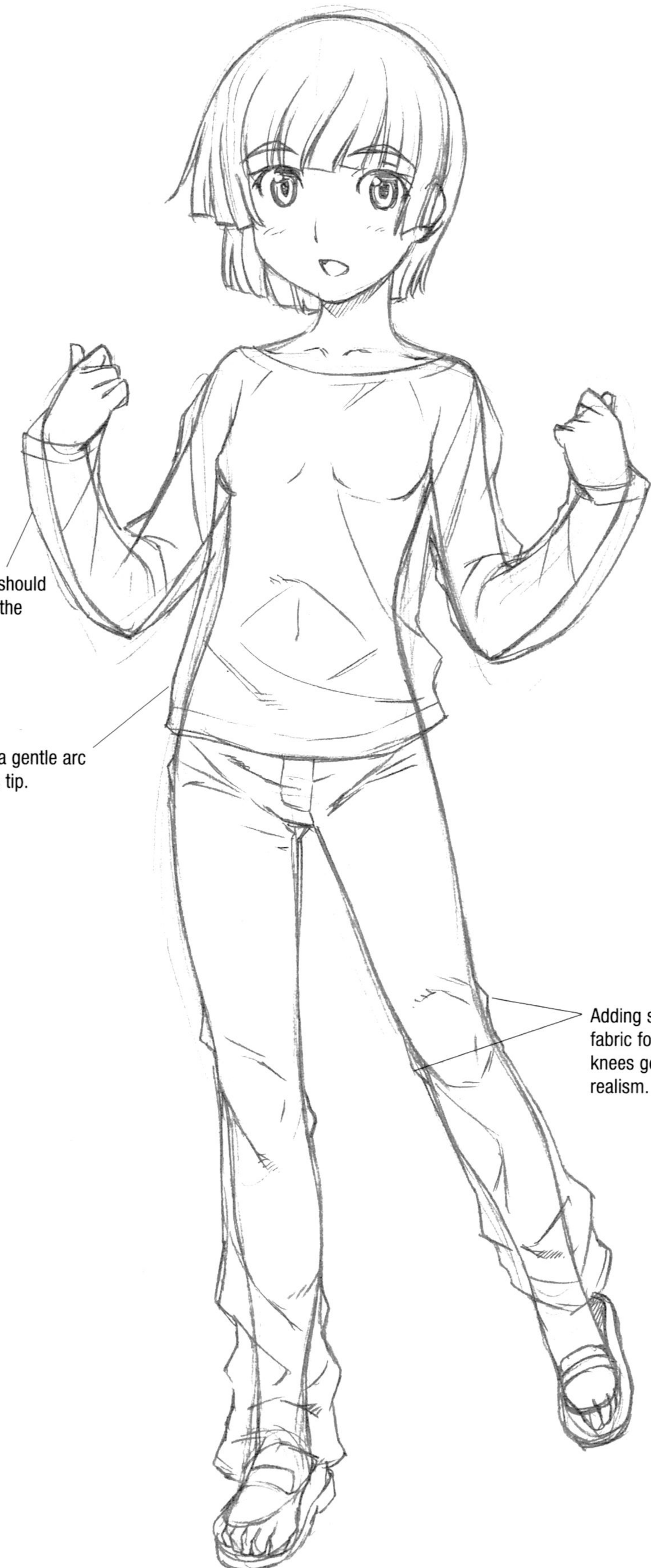
The addition of creases on the jeans marks the final touches. Use hatching to create the distinctively thick feel of the jeans' denim.



Thickening the contour extending from the posterior to the groin heightens the sense of three-dimensionality.



At the very end review the final image, and if you feel the need, only then add rippling and bunching behind the knees.



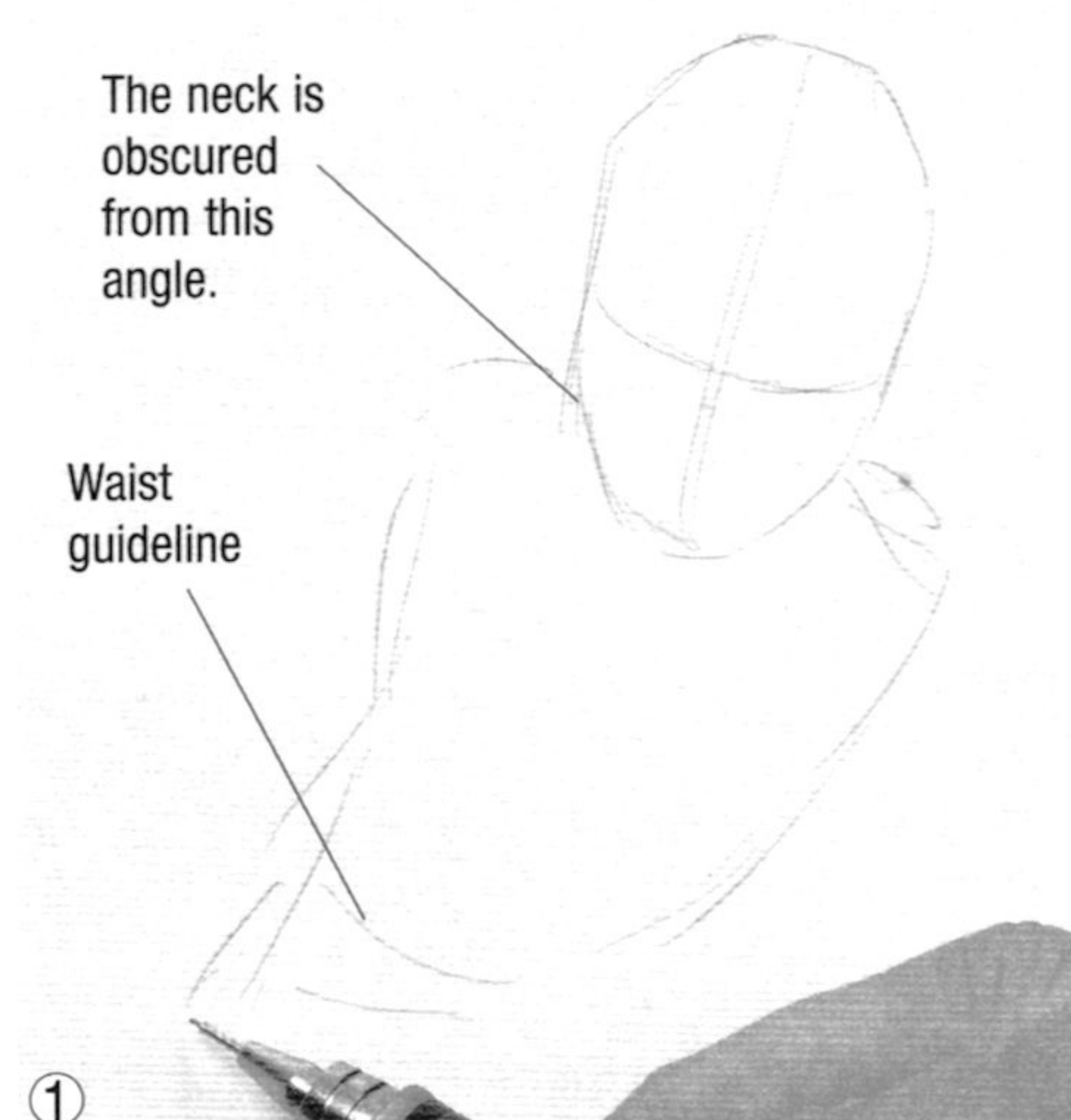
The sleeves contours should be at a distance from the arm's contours.

The shirt falls in a gentle arc from the breast's tip.

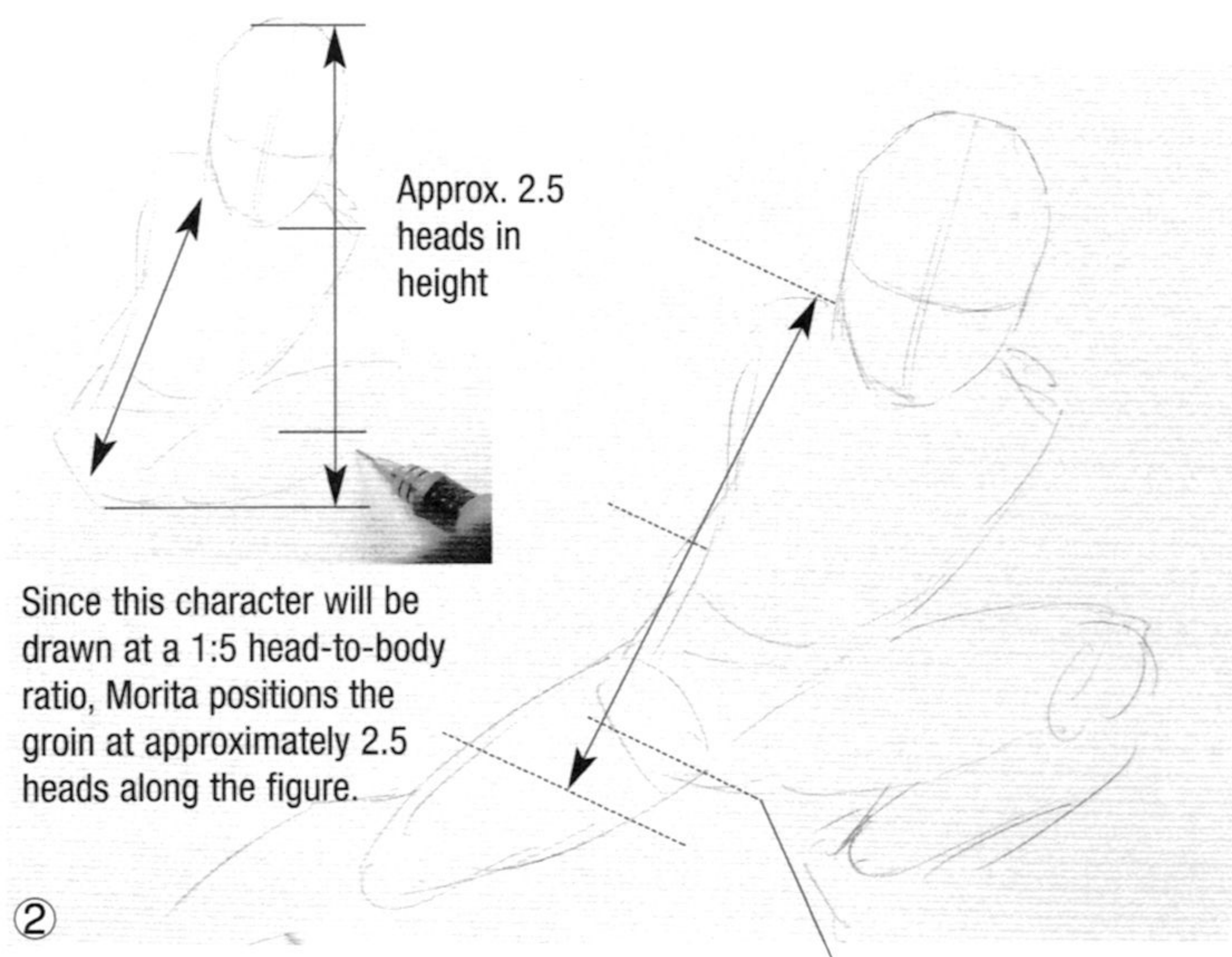
Adding small mounds of fabric form around the knees generates an air of realism.

Drawing a Character Wielding a Sword: 1:5 Head-to-Body Ratio

1. Sketching a Circle-and-X Layout and the Torso's Layout

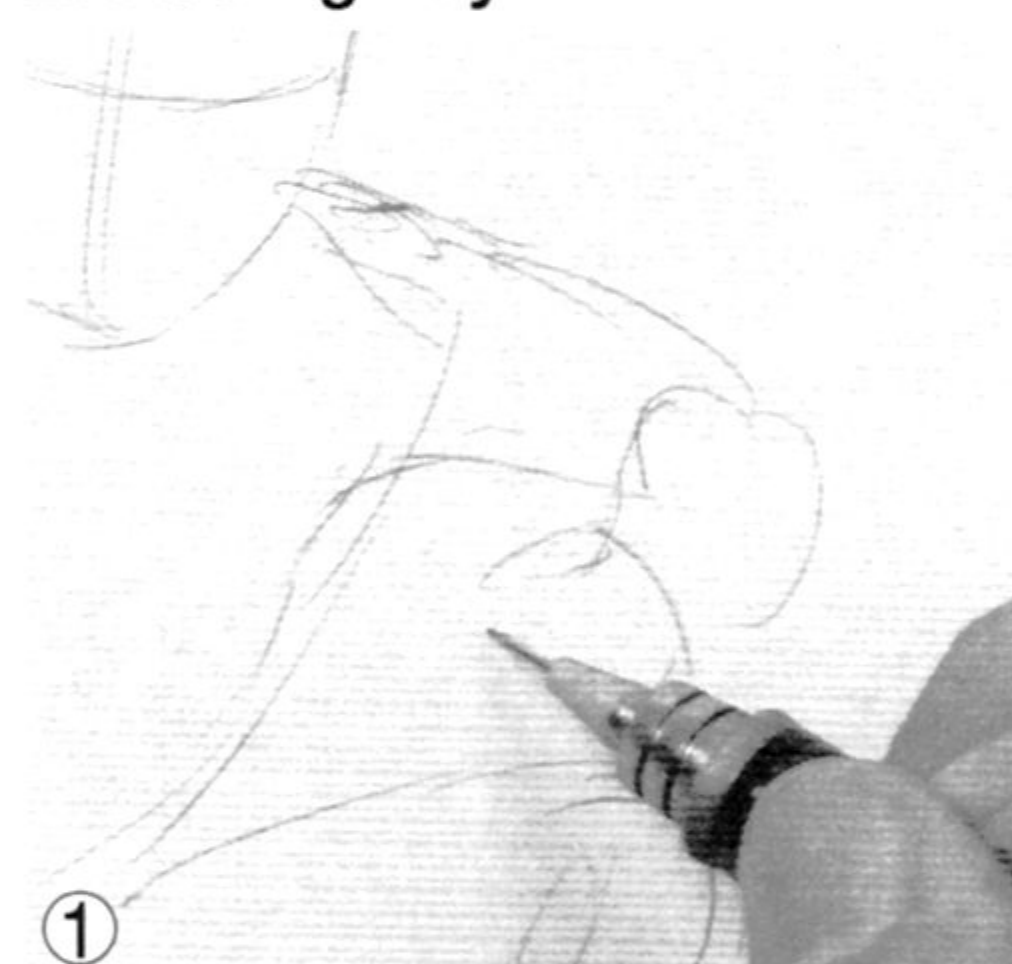


First, Morita sketches the head and the torso's layout.



The torso shown here is actually shorter than two heads in length. Normally, when drawing from an angle where the neck becomes obscured, the torso is made shorter than it would be drawn in a standing pose.

2. Adding Layouts for the Arms

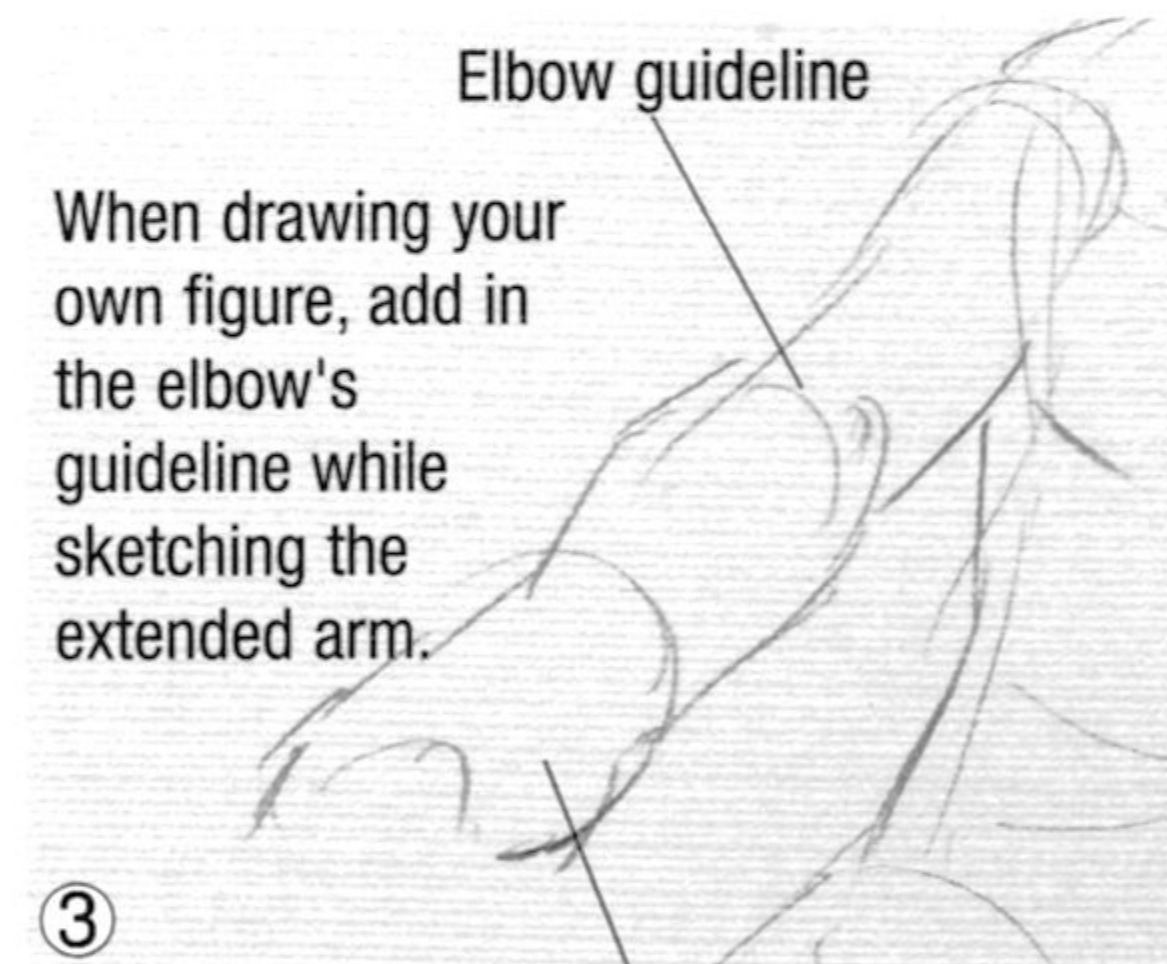


Morita works from right to left.



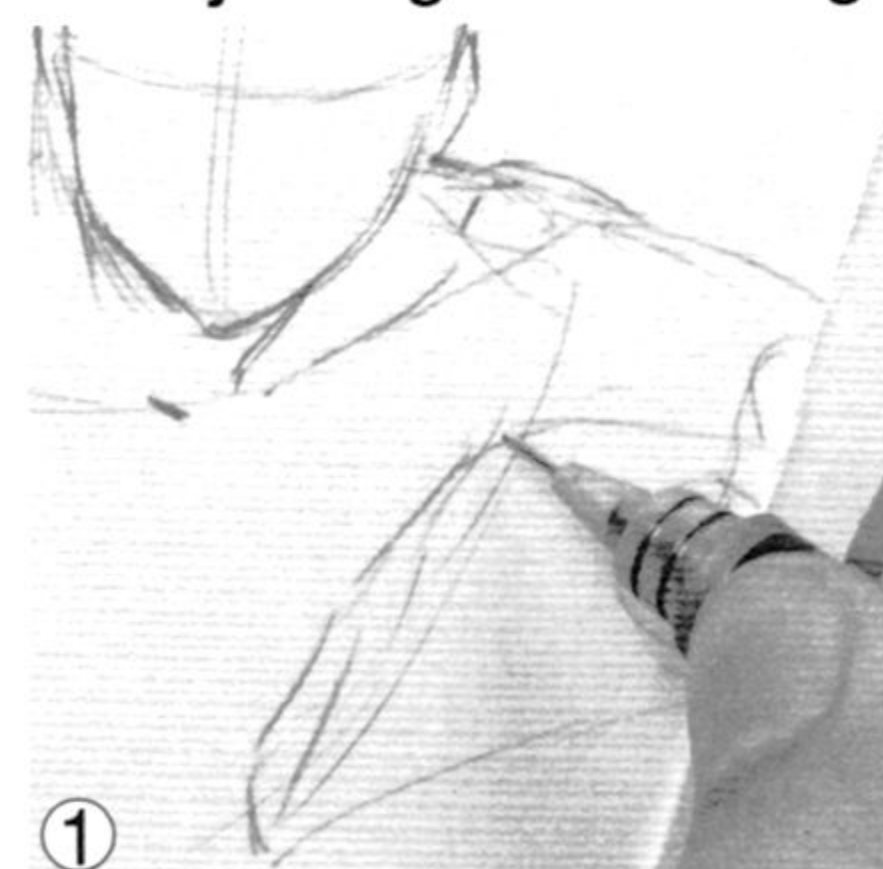
Morita draws the right arm while noting with sketched layouts and guidelines where the left arm and the clavicle will be located.

The clavicle guideline clarifies how the shoulder's upper surface appears.

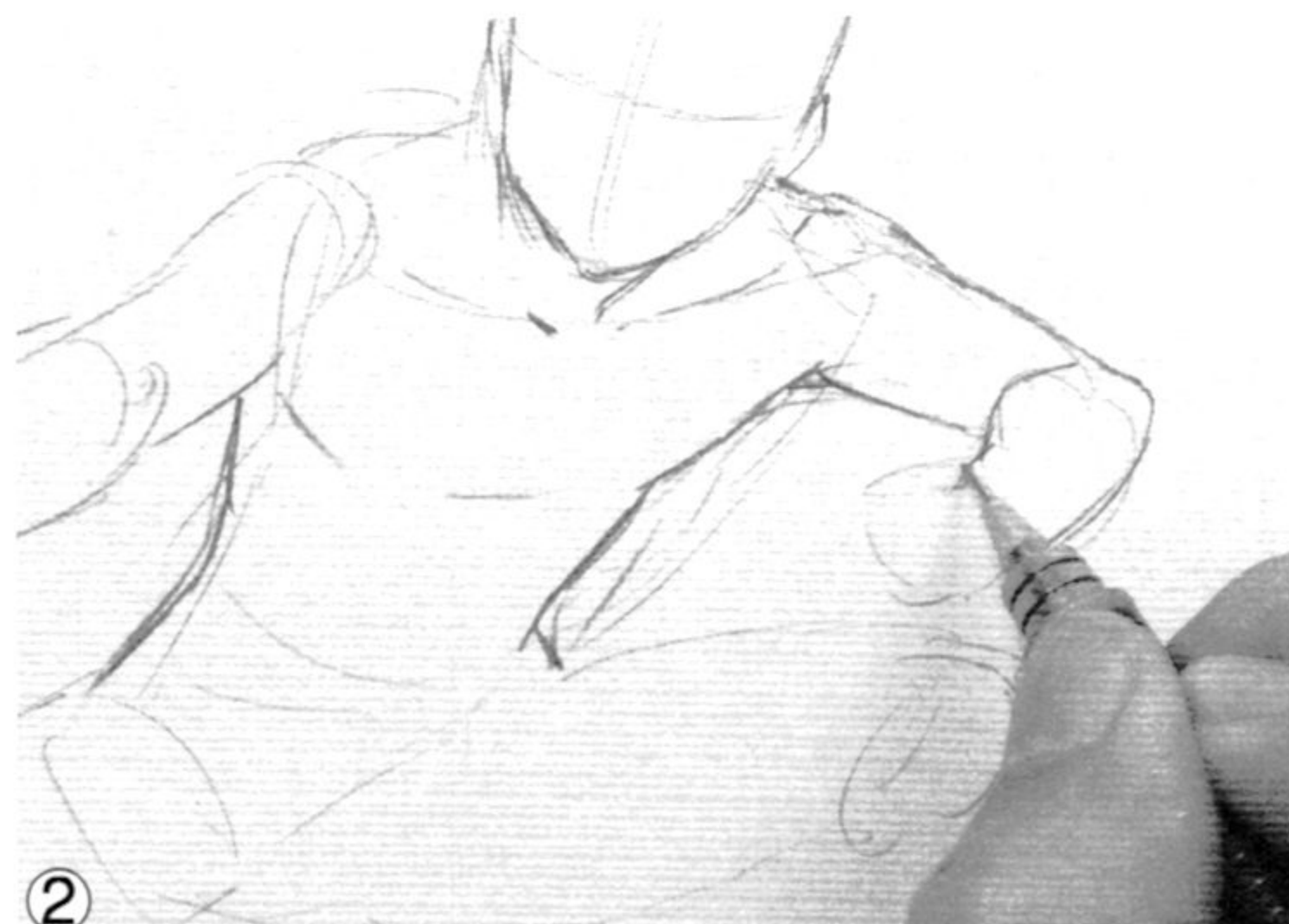


At this stage, the hand's layout is posed to reflect the grasping of a sword hilt.

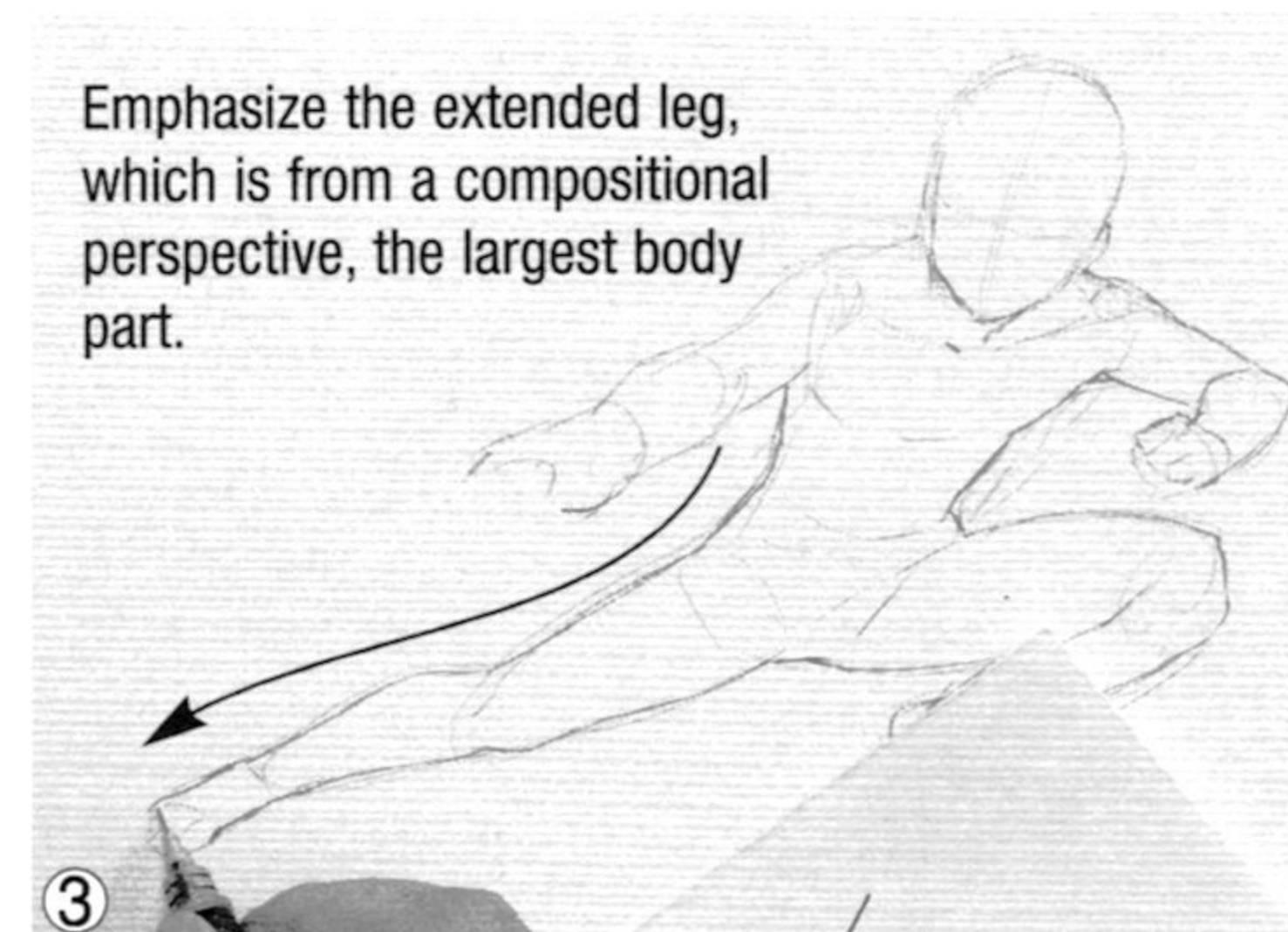
3. Adjusting the Full Figure's Contours



Morita adjusts the contours, starting with the head and particularly around the jaw. He works his way to the body.

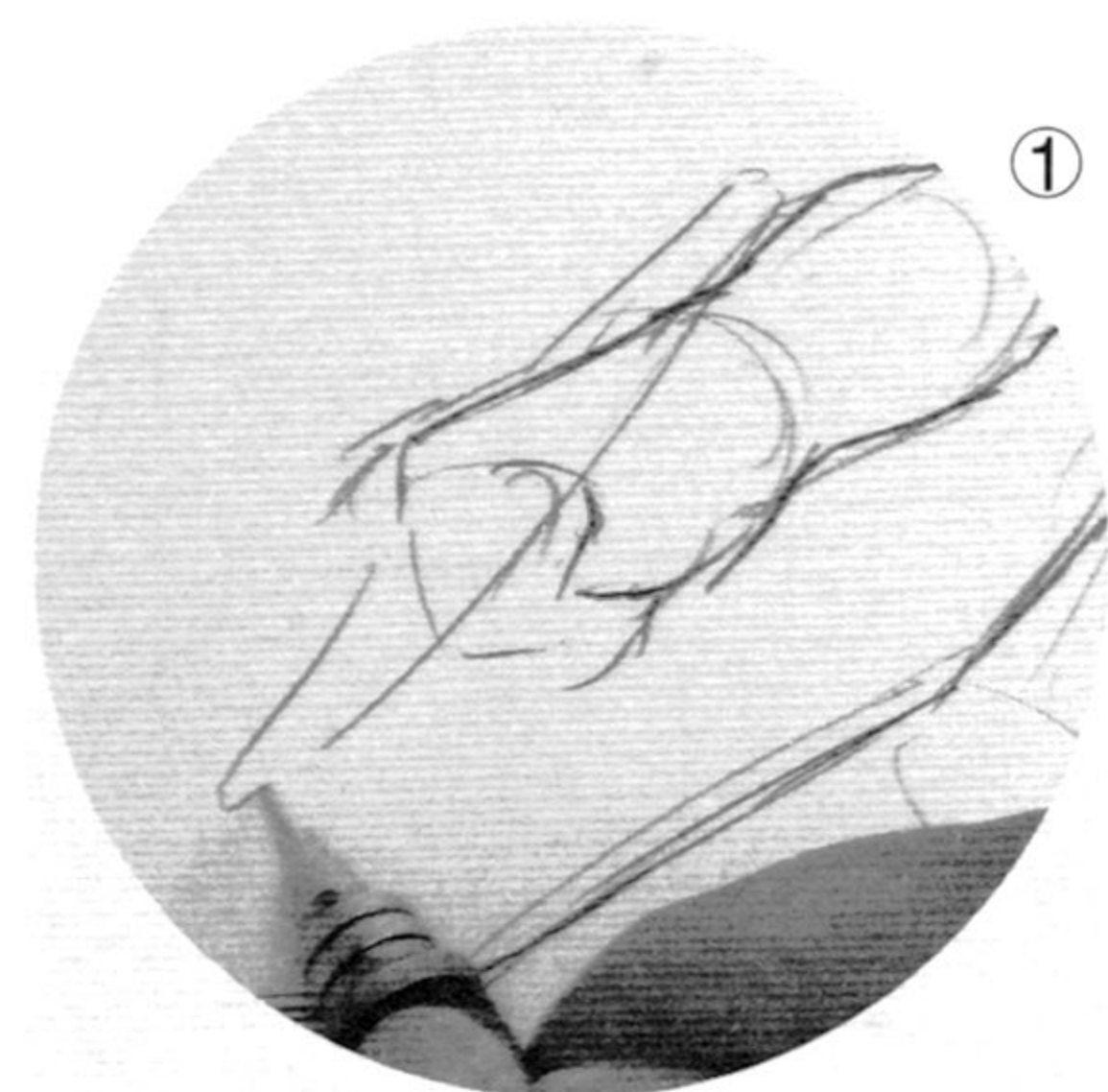


Morita draws the arms after reinforcing the torso's contours.

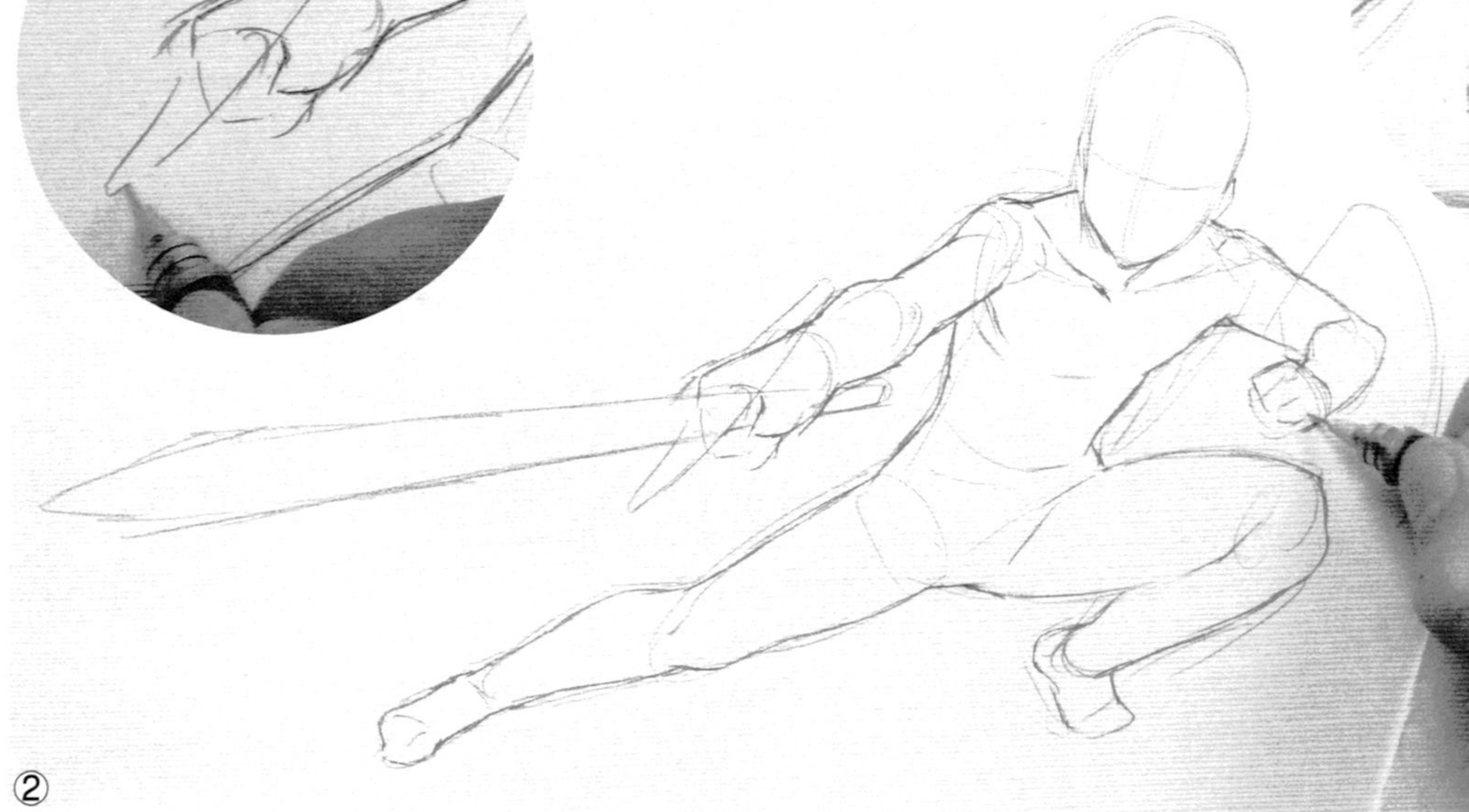


Use a masking or blotter paper to avoid smudging the drawing.

4. Drawing the Sword and Shield



① Start by drawing the sword's hilt.



This shield attaches to the arm. Often, the shield will obscure the arm in the final drawing. However, as with drawing clothing, the figure should be drawn in its entirety first. This will result in a more convincingly drawn character.

② The completed contour sketch, seen above, includes the nude figure, the shield, and the sword.

5. Drawing the Face and the Hair



Morita adds the eyes, the eyebrows, the nose, the mouth, and the hair in that order.

6. Drawing the Clothes

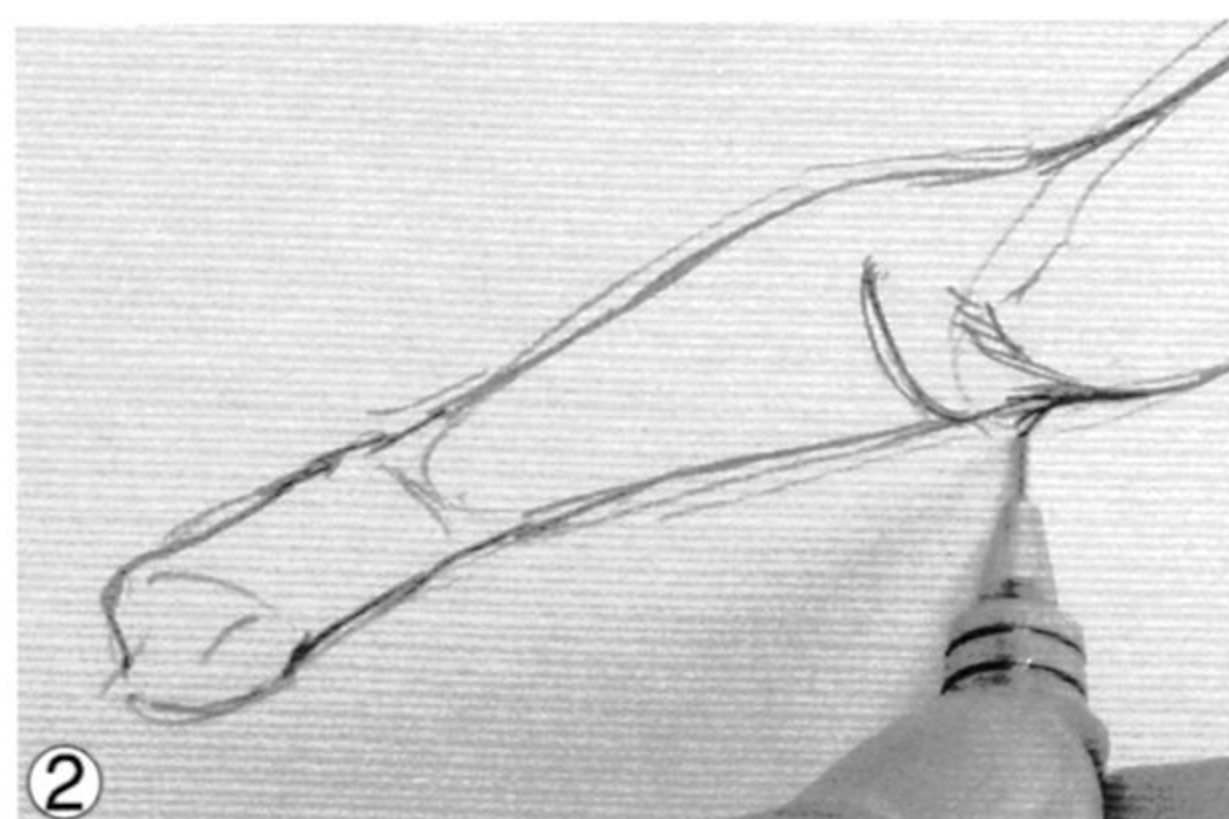


Morita draws the armor's breastplate, starting with the shoulders. This alone generates the look of lightweight, leather armor.

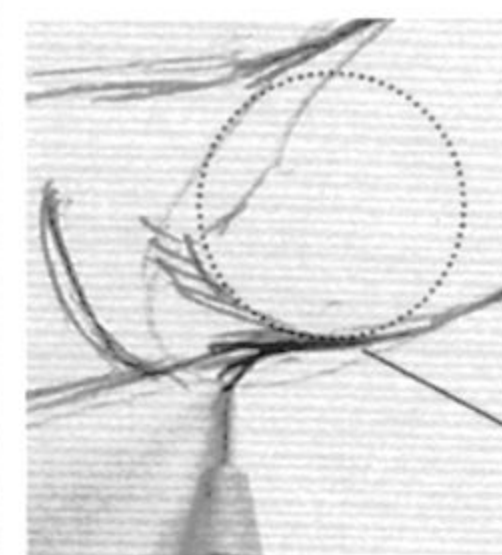
7. Drawing Movable Body Parts



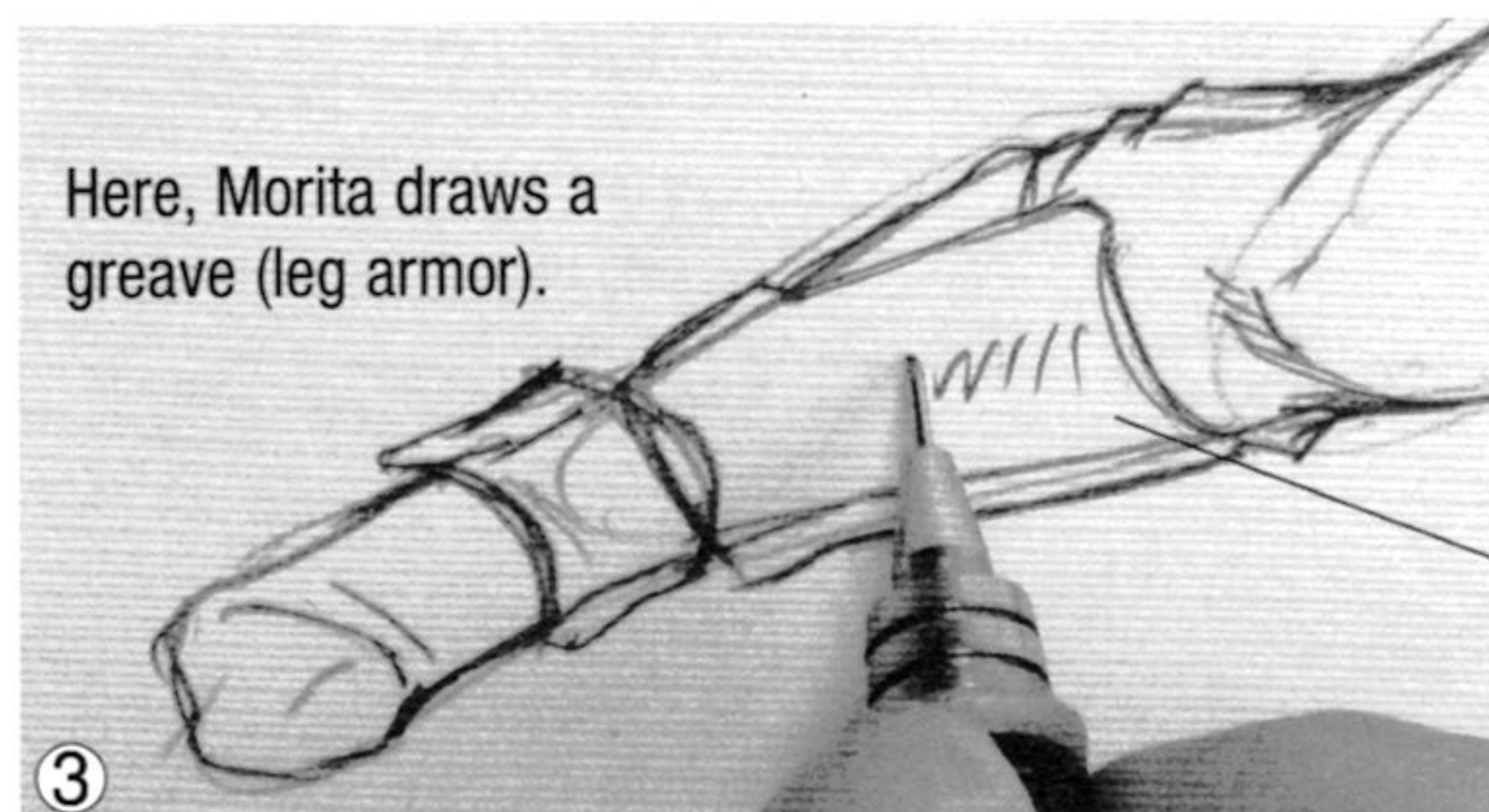
① Morita adds creases to the abdominal area.



To draw the leg, Morita begins with the knee.

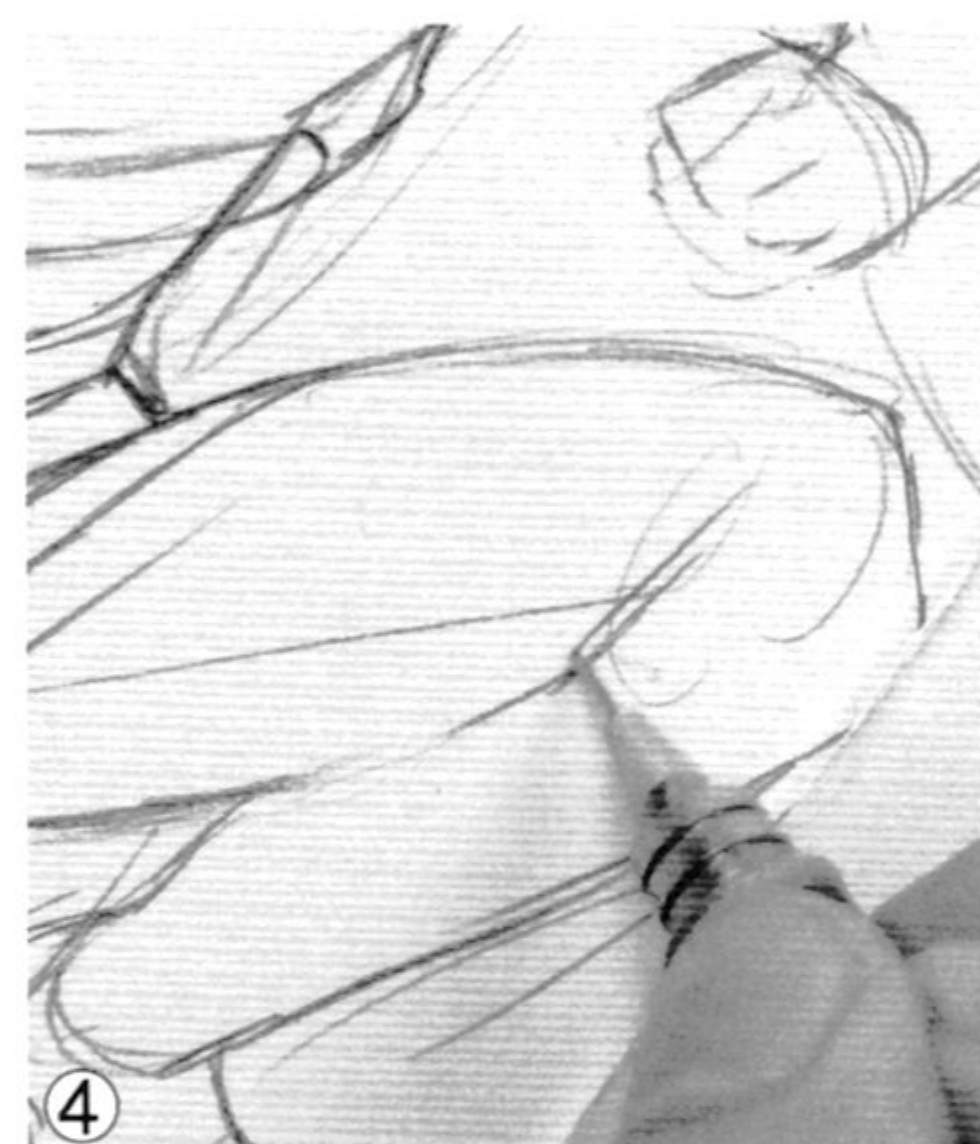


Use hatching to shade the knee, maintaining awareness of the joint's round form.



Here, Morita draws a greave (leg armor).

Armor has volume. In the figures on this page, Morita uses hatching to portray leather and other textures. When drawing on your own, leave a wide gap between the hatched strokes.



④ Morita uses large, diagonal lines to portray the bent knee, emphasizing the sense of "bending."



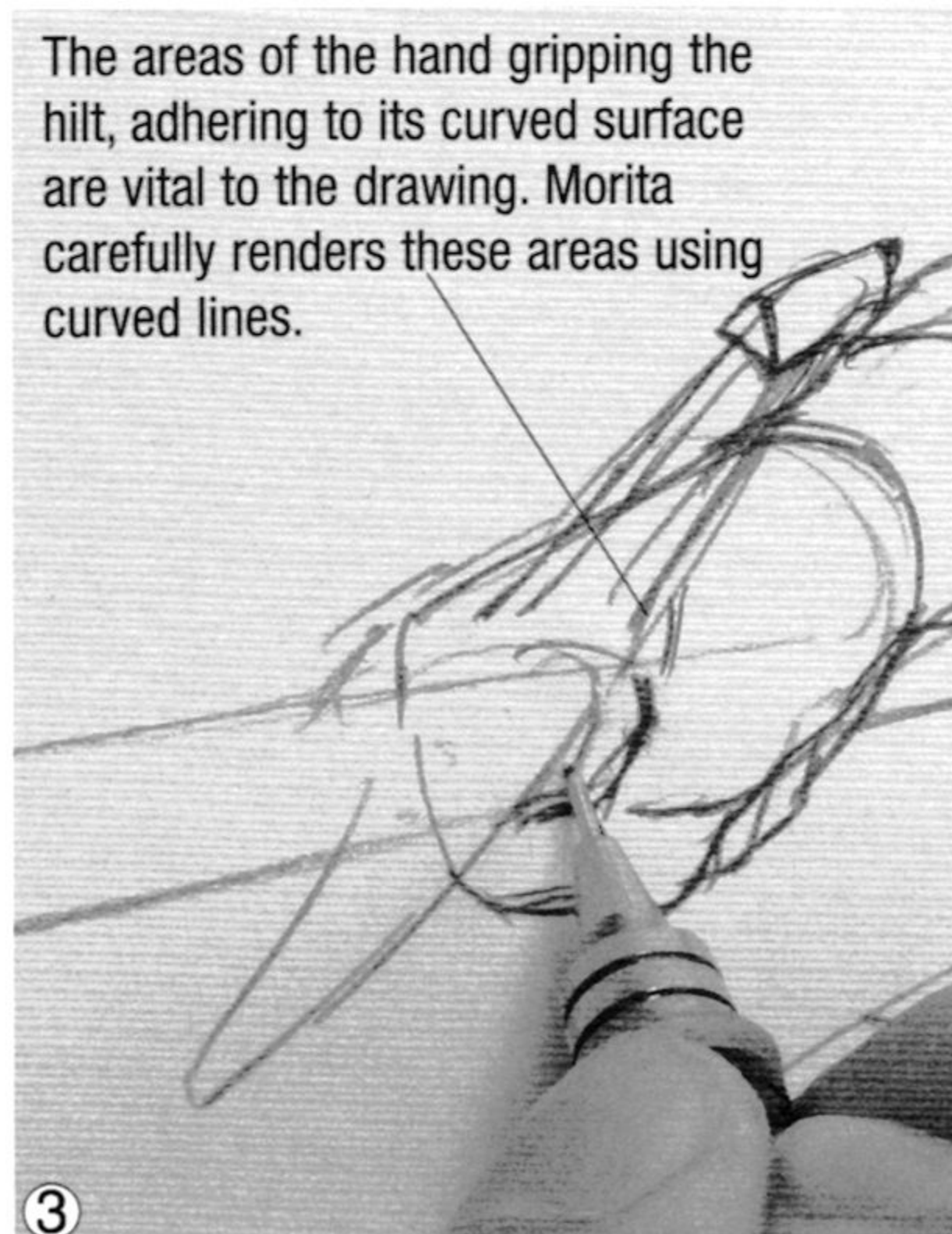
⑤ Morita draws the armor's contours outside of the leg's contours, thereby giving the armor a sense of volume.

An abundance of curved creases were added to the back of the knee.

8. Adjusting the Shapes of the Shield and Sword



① Morita reinforces the exterior contours while finalizing the forms.

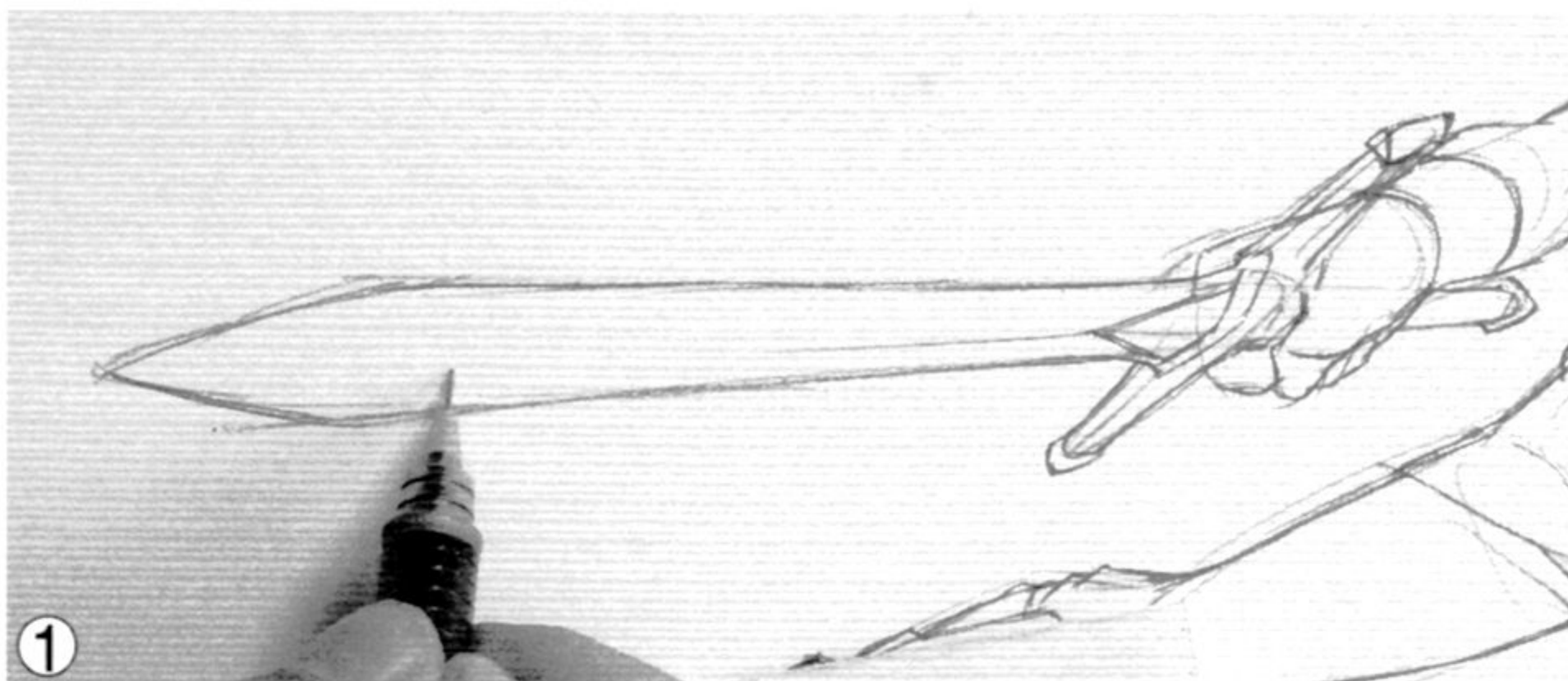


The areas of the hand gripping the hilt, adhering to its curved surface are vital to the drawing. Morita carefully renders these areas using curved lines.

③ In the above, Morita adjusts the hilt's form and carefully draws the hilt.



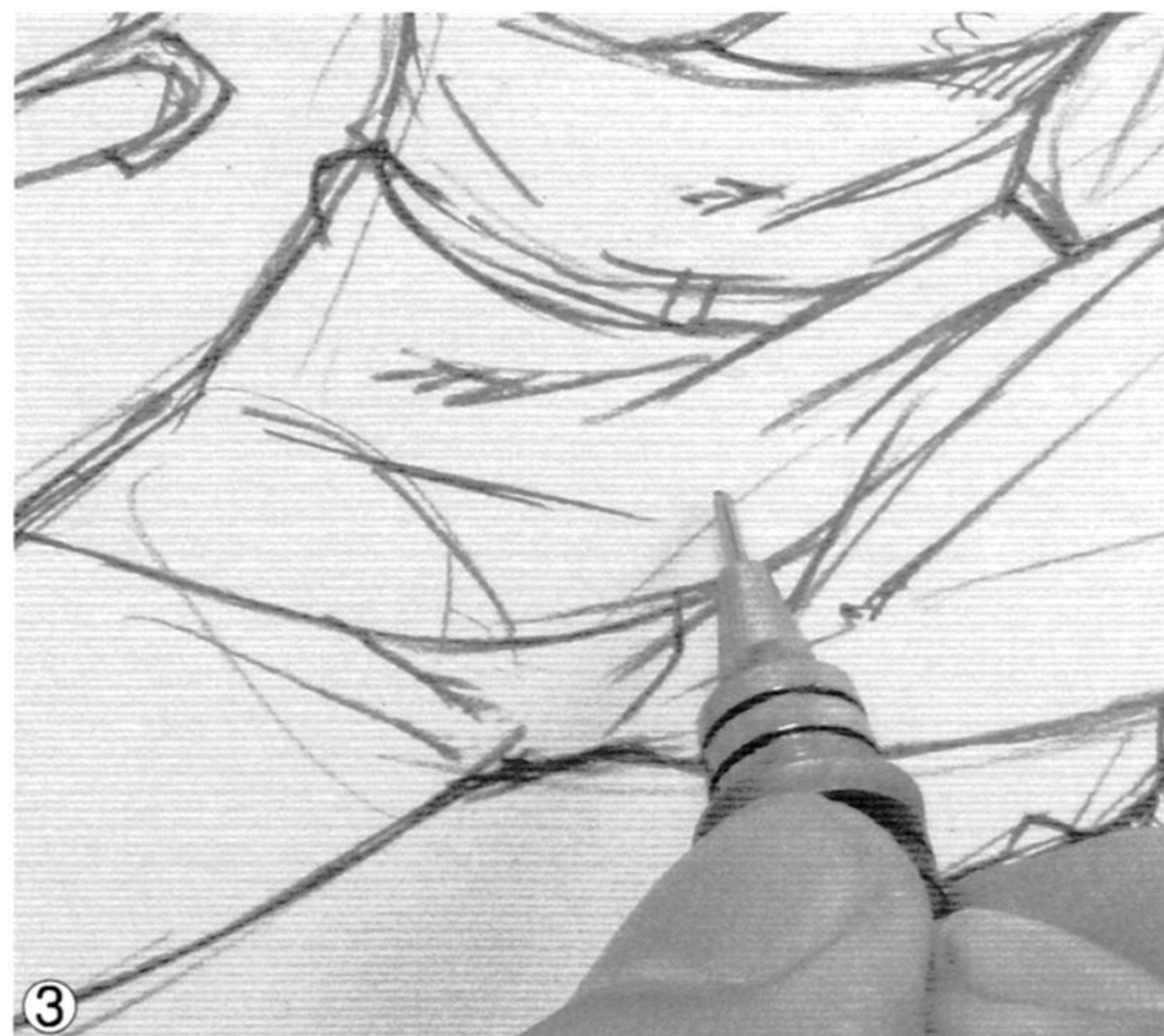
9. Adding the Details



Morita adds strokes that give the sword a sense of texture.



The hatching (diagonal lines) seen here give the armor a sense of leather.



Morita uses crisp, straight strokes for the clothing creases.



To the left, Morita adds lines to create the illusion of creases concentrated at the underarm.



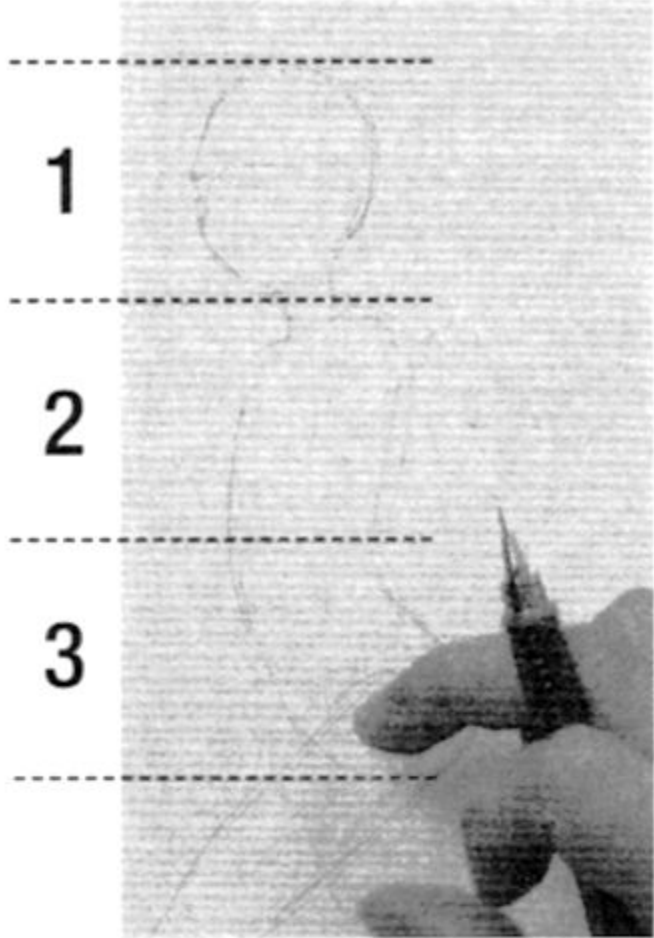
Final Image

Drawing a Character Running: 1:6 Head-to-Body Ratio

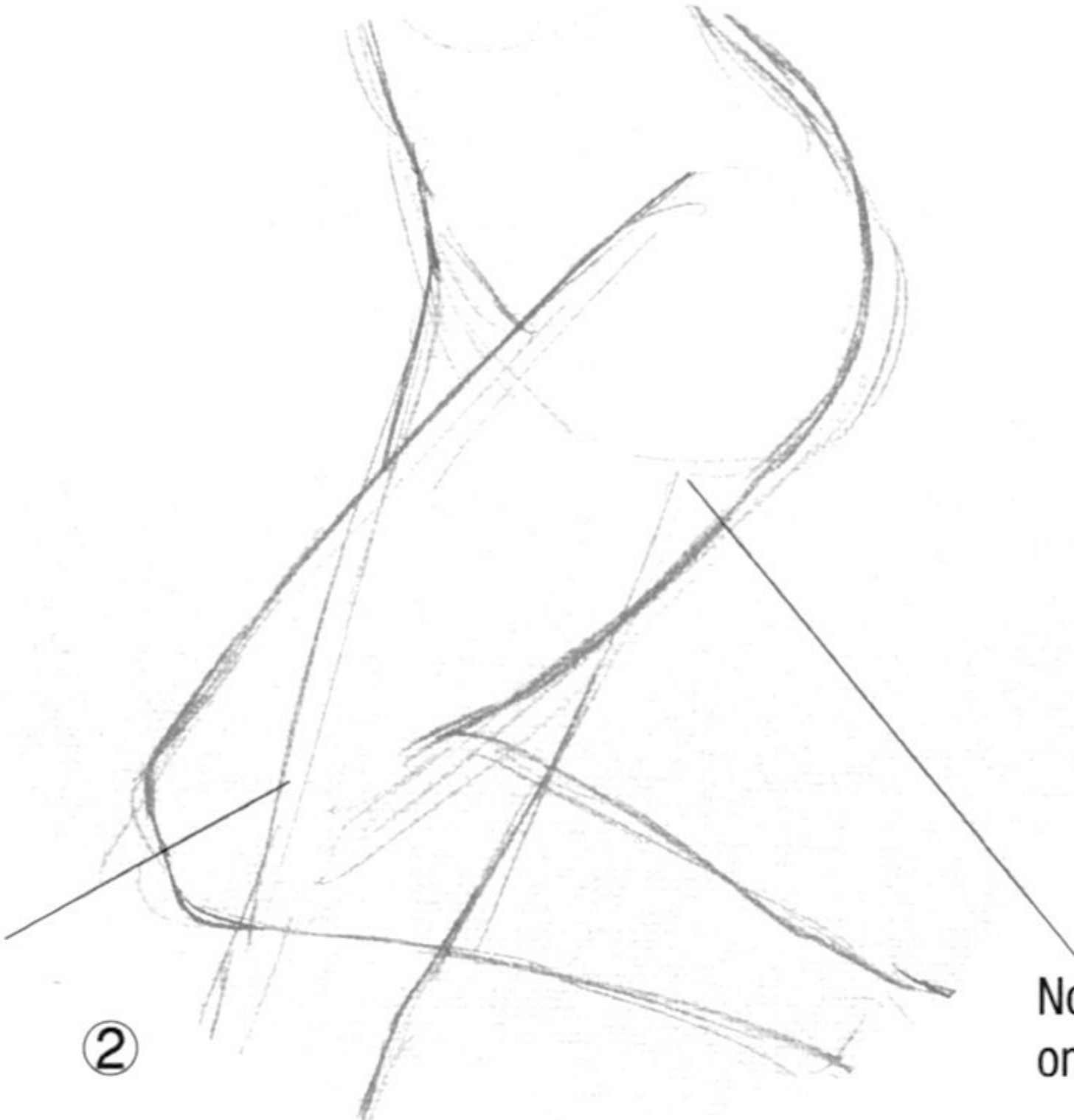
1. Sketching the Full Figure Layout



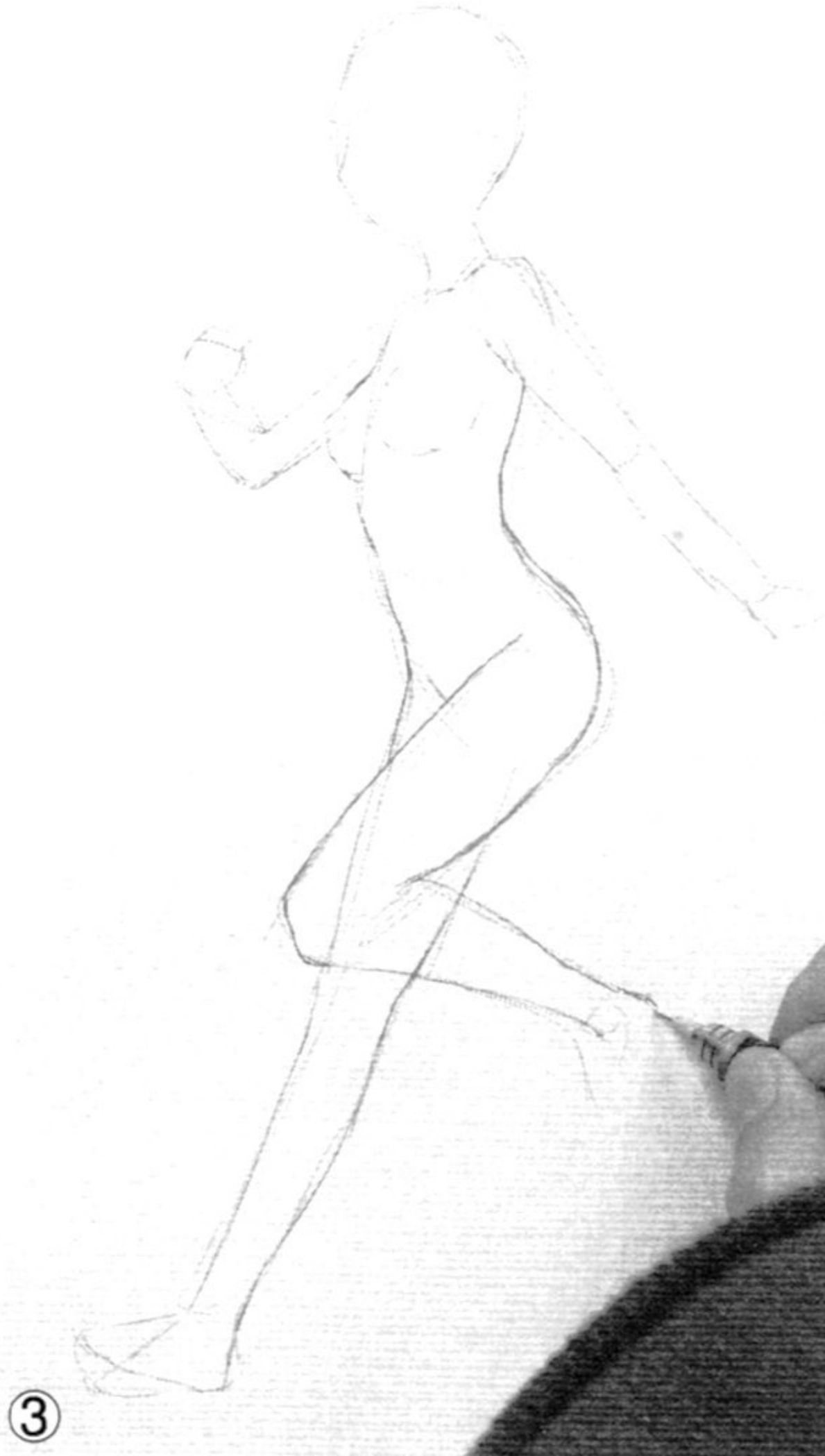
Morita starts by drawing a circle-and-X layout of the head and then proceeds to draw the torso's layout.



Since this character will have a 1:6 head-to-body ratio, the groin is positioned three heads' length along the body.



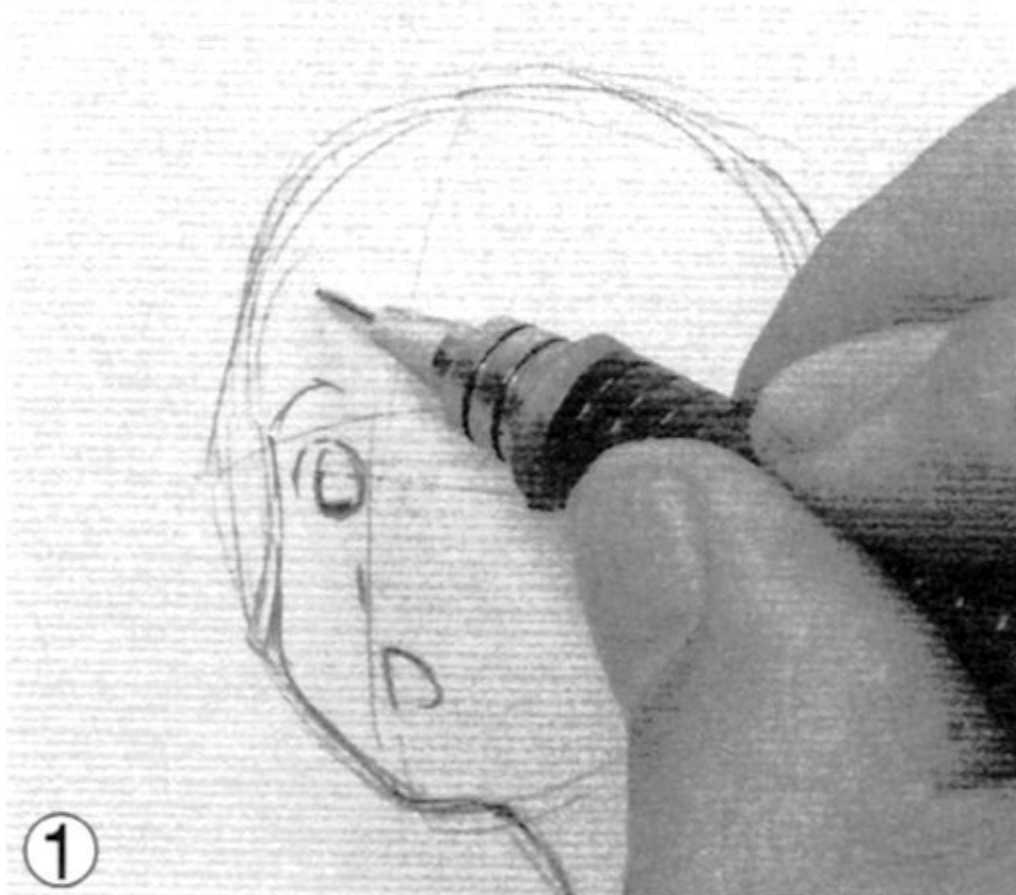
Parts of the body that will be obscured in the final image should still be included at the layout stage.



Once Morita has completed the full figure layout, he adjusts the exterior contours, reinforcing the lines.

Note that Morita included the hip on the far side of the figure.

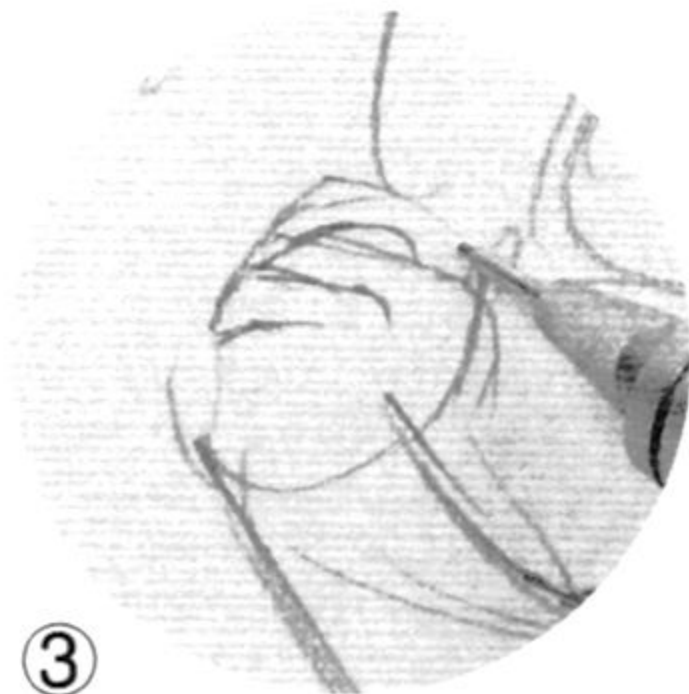
2. Drawing the Head and Further Adjustment of Contours



Morita draws the face after sketching the jaw.



When drawing on your own, maintain awareness of how the movement of running will affect the direction in which the hair flows.



Morita draws the hand, fingers, and other details.



Morita saves her ribbon and flowing locks of hair for last.

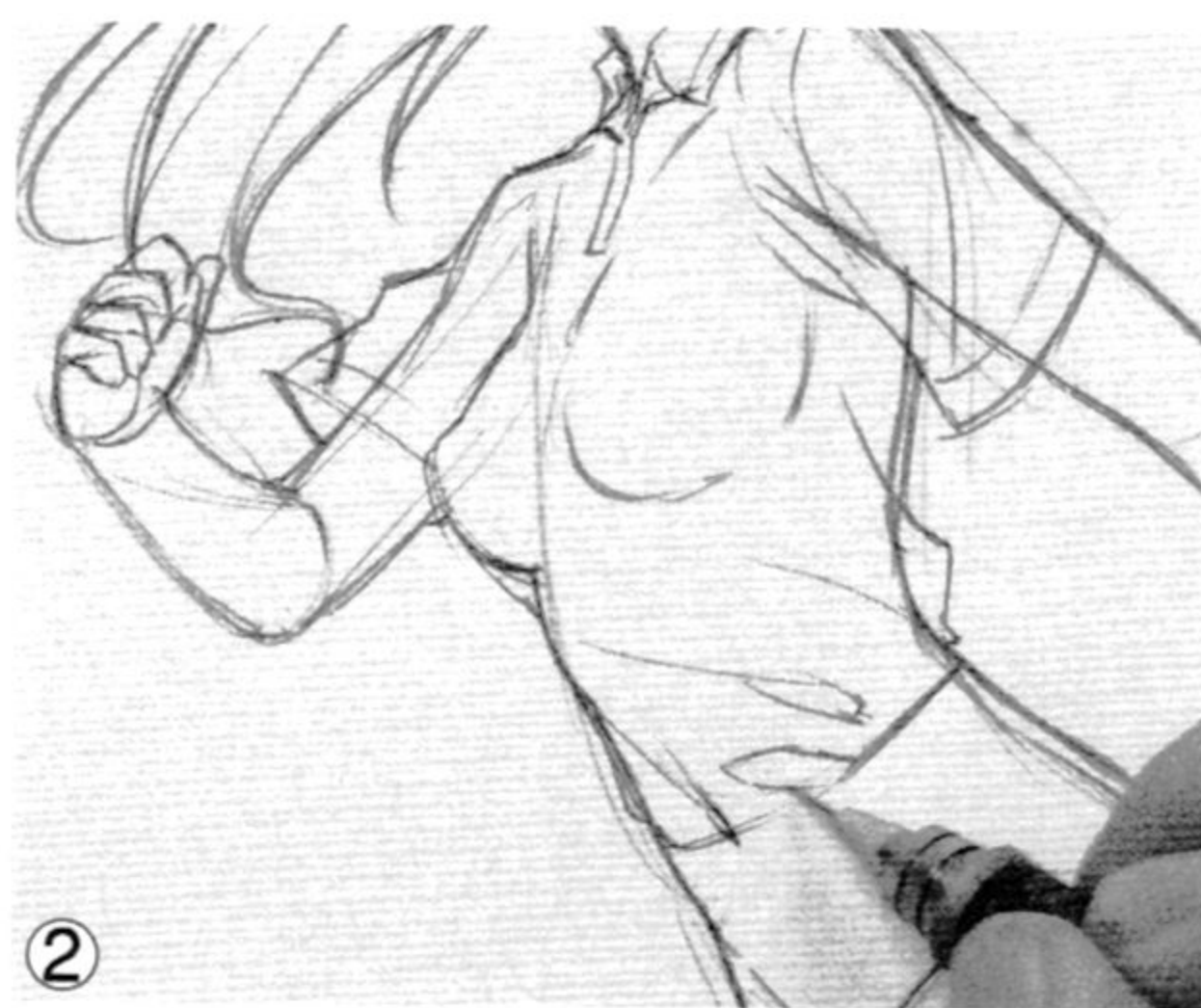


Final Nude Figure Sketch

3. Drawing the Clothes



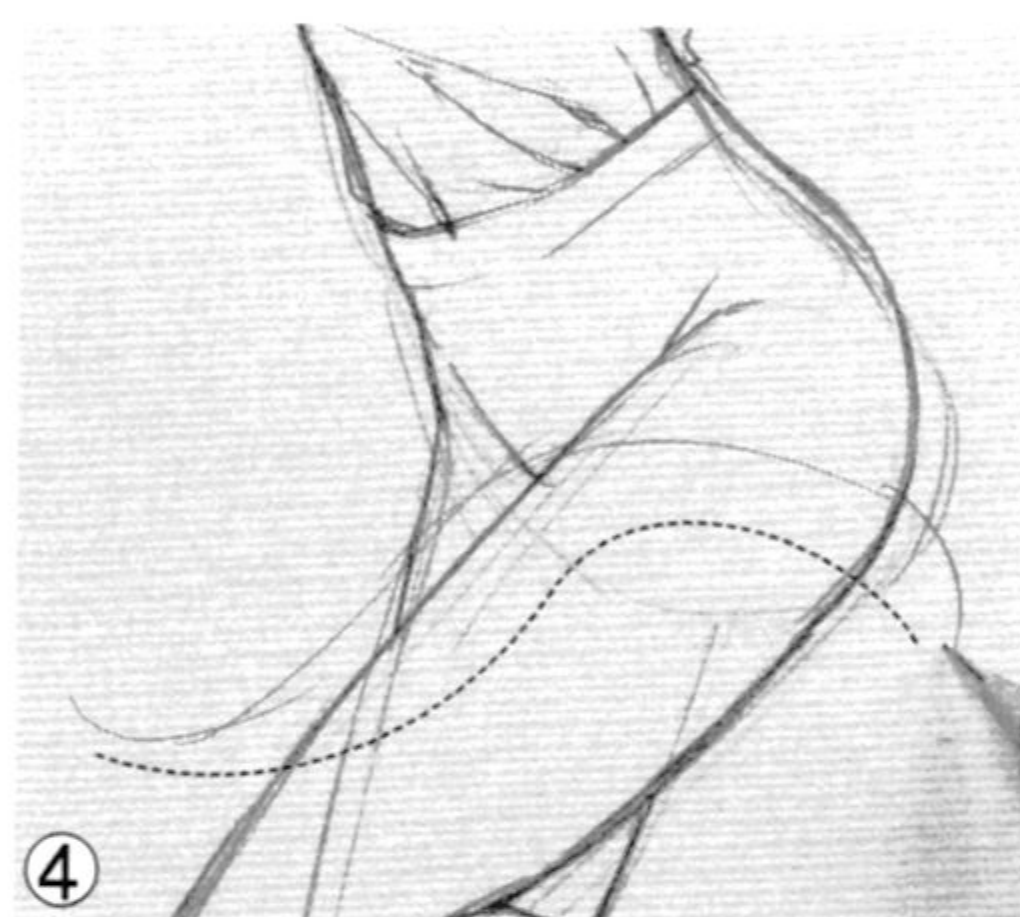
① First Morita draws the collar and then the sleeves.



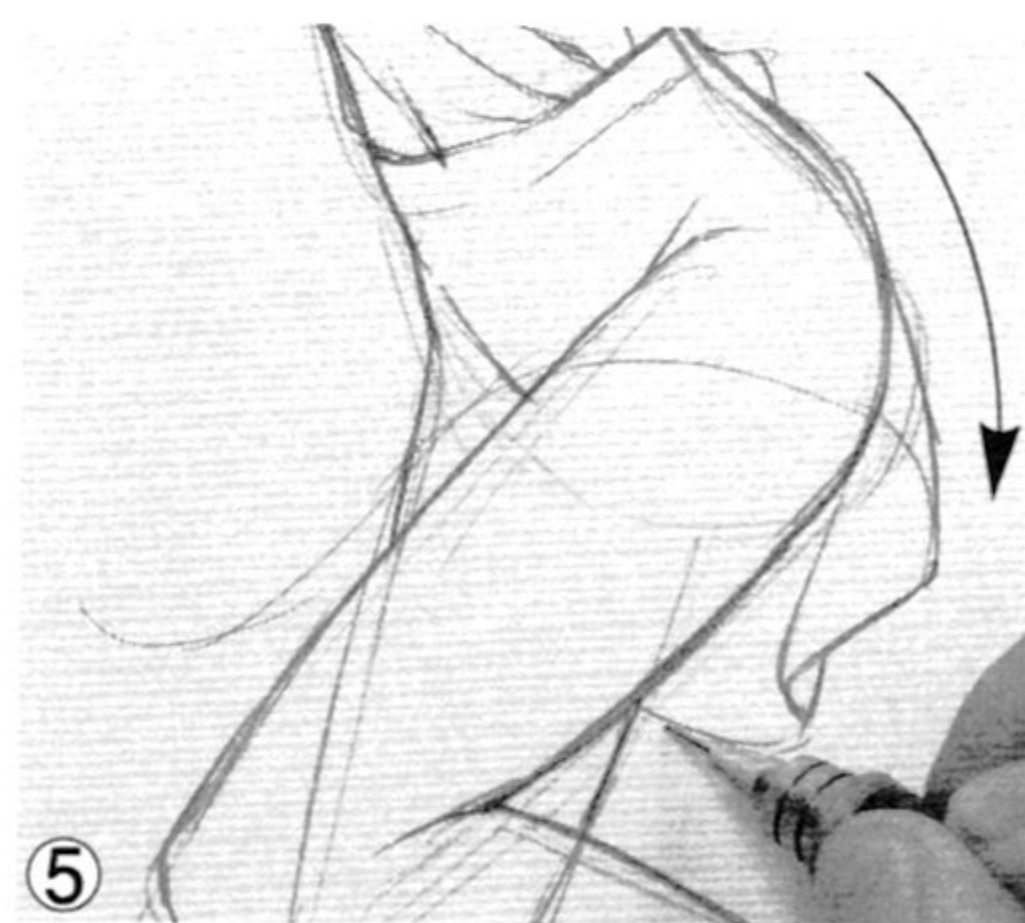
② Next, Morita reinforces the line at the skirt's waist and adds contours to suggest bunched fabric.



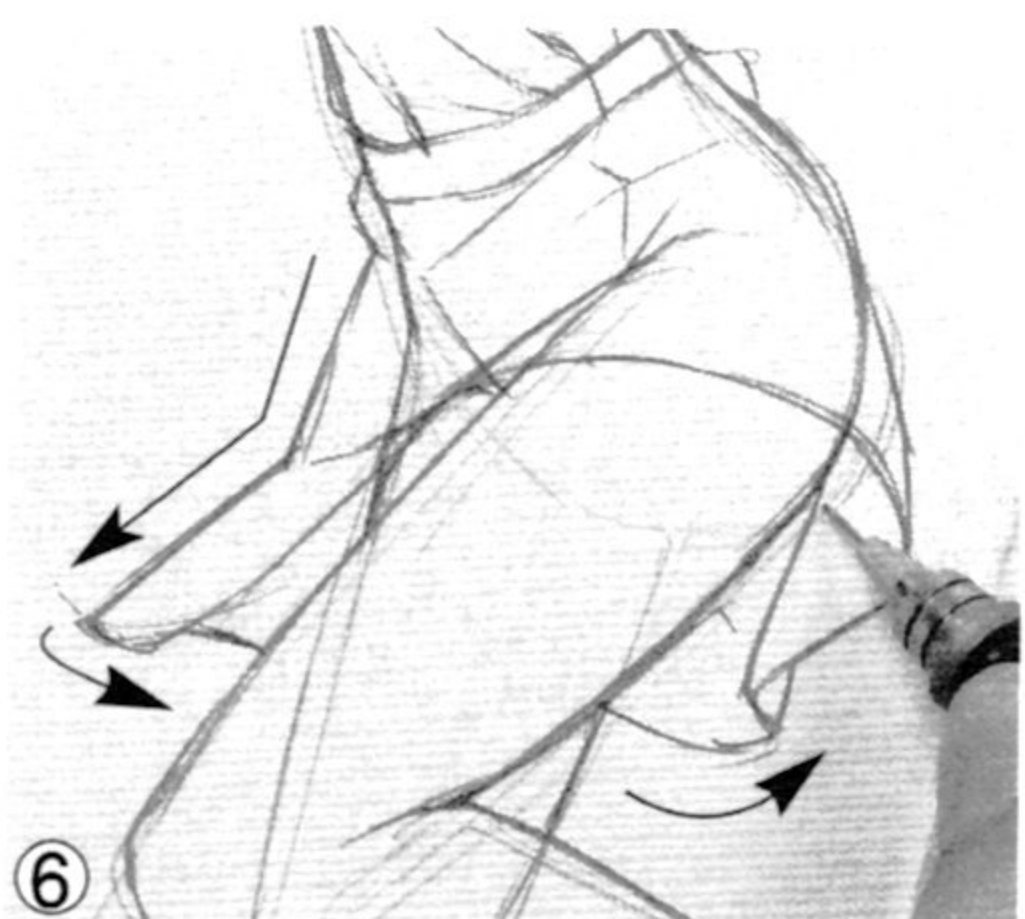
This line defines the waist, which is the top opening in the skirt. A carefully drawn, gently arcing line creates the illusion of a three-dimensional girl actually wearing a skirt.



④ The skirt's hemline is added using an S-curve to evoke a feeling of movement.



⑤ Morita connects the skirt's contour to the body's contour, making the skirt scoop inward.



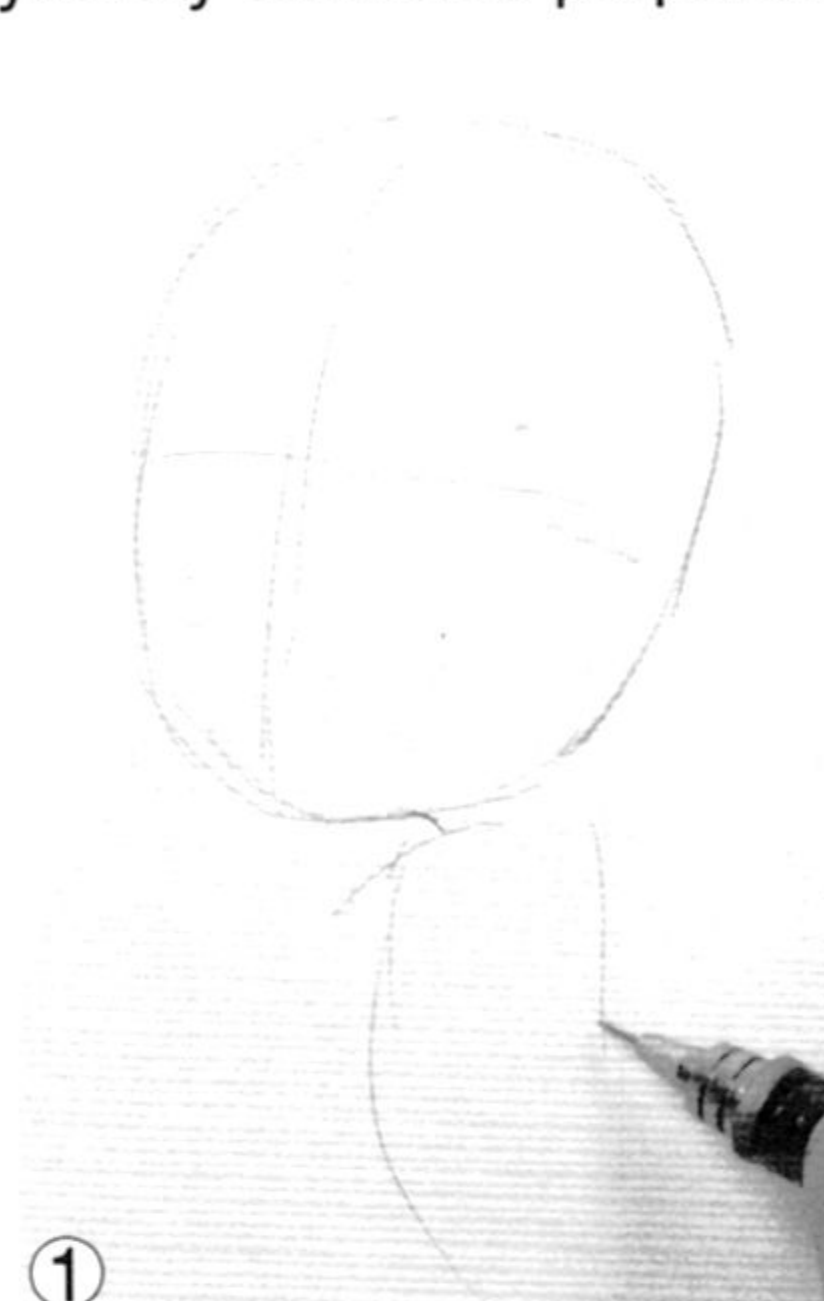
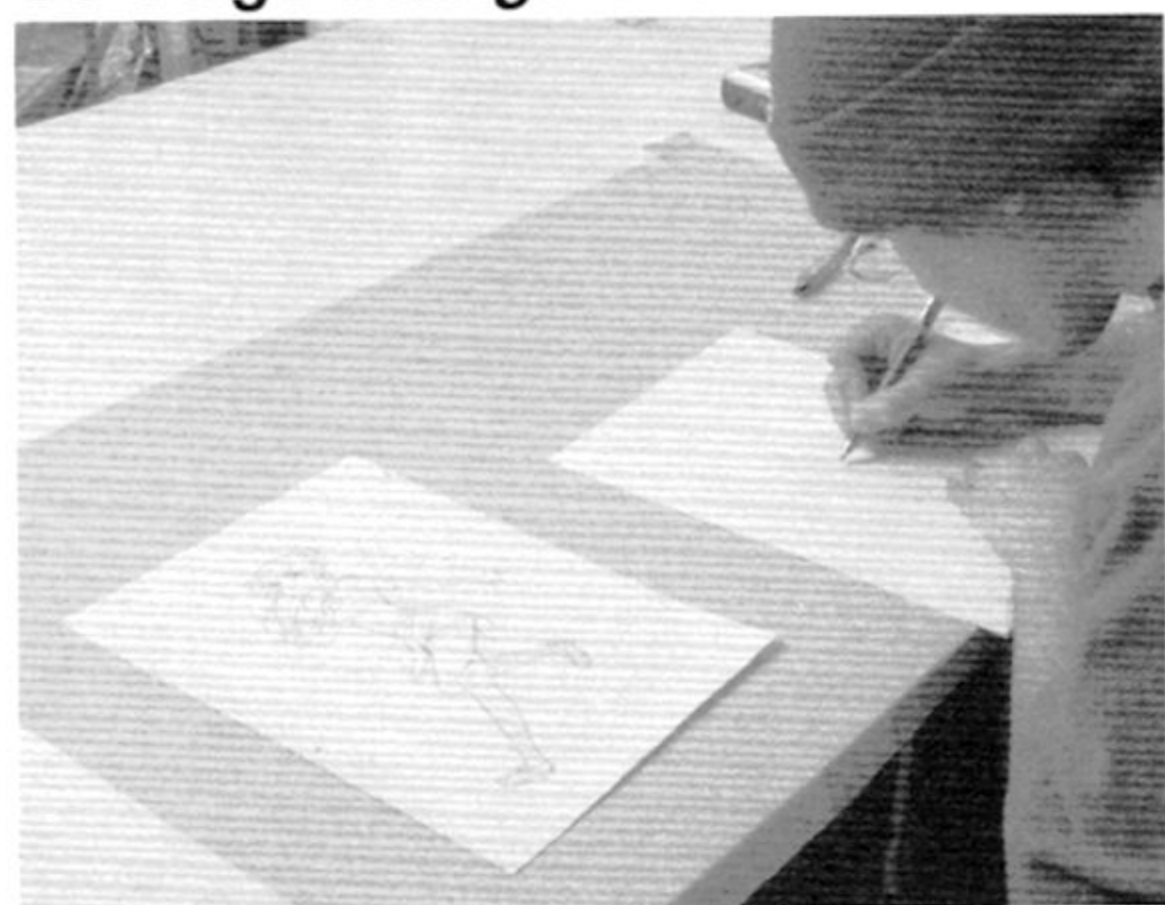
⑥ Morita adjusts the contours to complete the drawing.



Practice: Transforming a 1:6 Head-to-Body Ratio Character into a 1:2.5 Head-to-Body Ratio Character

Chibifying a 1:6 Head-to-Body Ratio, 35-Page *Manga* Character

Chibi characters, which some consider to have given birth to *manga*, were created from stylizing and abstracting characters of physically attractive proportions.



①



②

Morita starts with the full-figure layout. He draws a slender, smallish torso, paying attention to the distinguishing features of the original character (the angle of the waist and legs) while drawing.



③

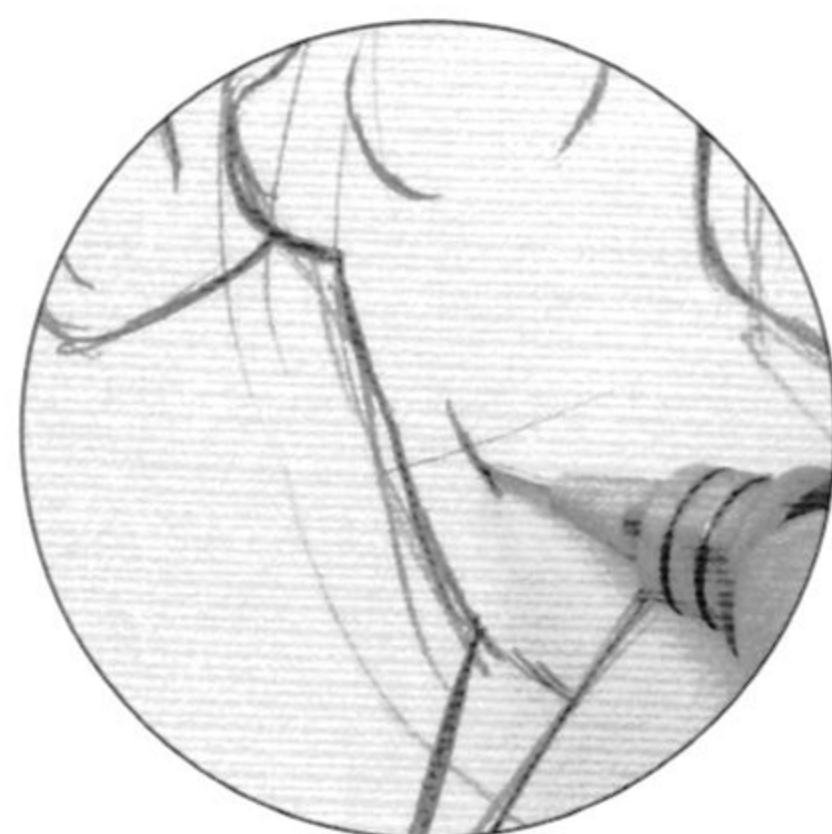


When drawing the tiny, stylized feet of a *chibi* character, match the angle of the legs to that of the original character.



④

Once Morita has finished the facial features, he begins adjusting the contours.



Morita draws the navel and other details to complete the nude sketch.

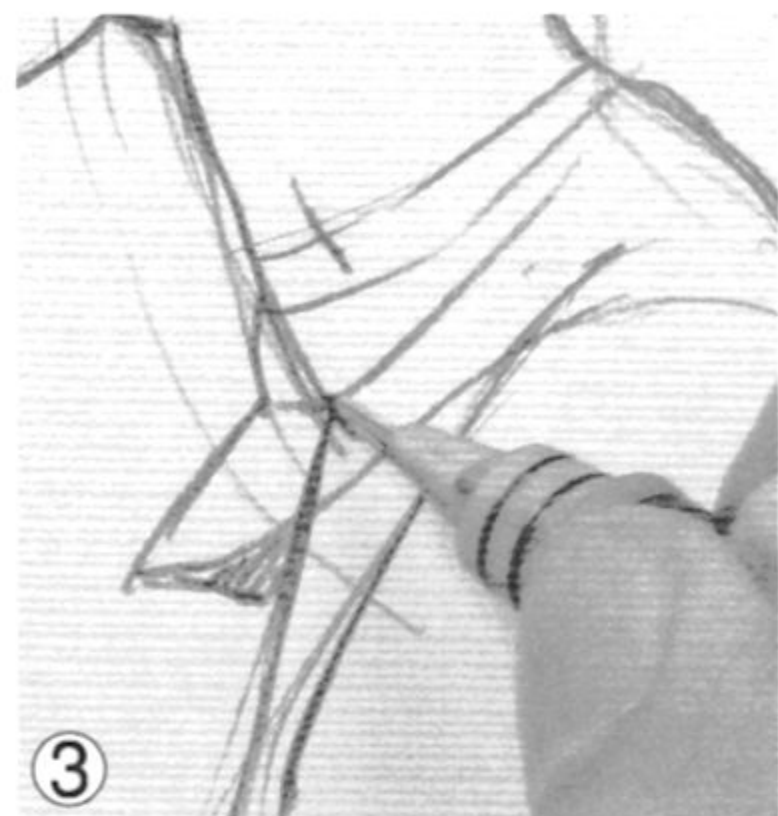
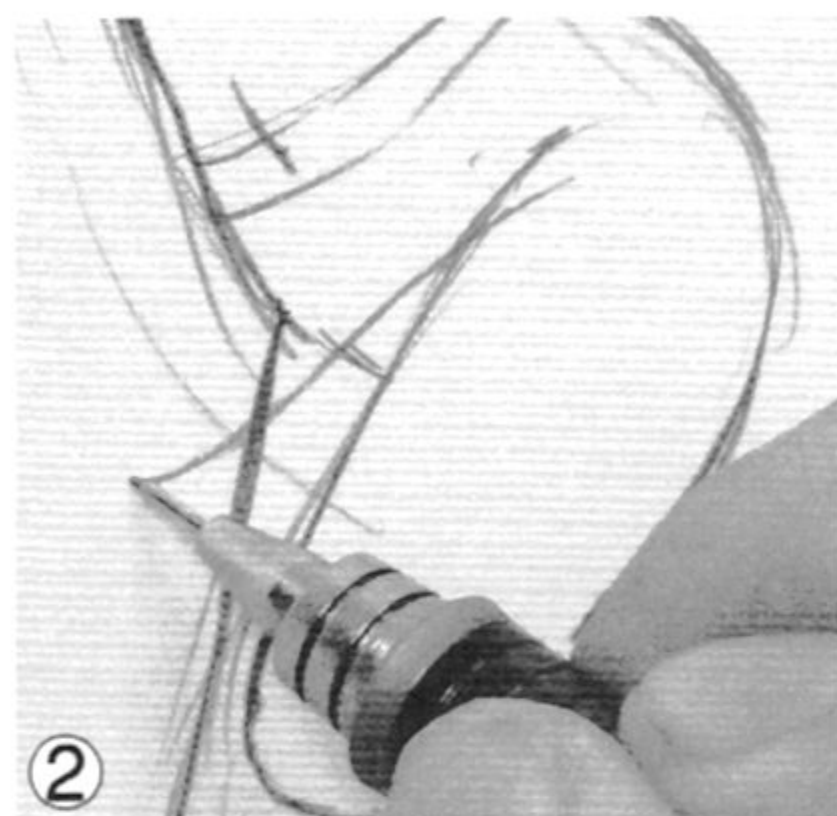


Final Nude Figure Sketch

⑤



The same steps should be followed in dressing a *chibi* character as when dressing a standard character.



The number of strokes used on the *chibi* character drawing is significantly less than that used on the standard character.



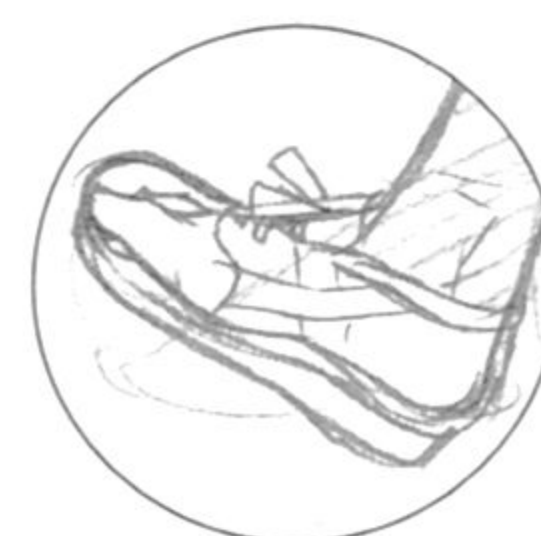
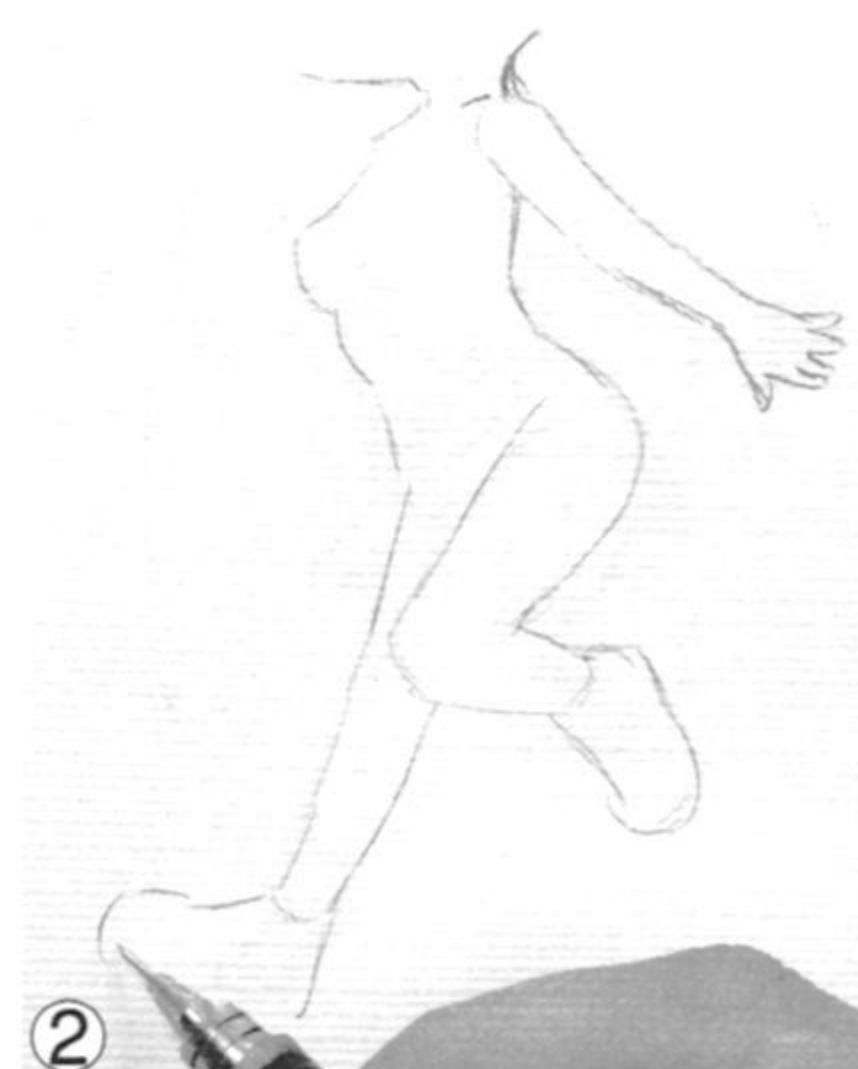
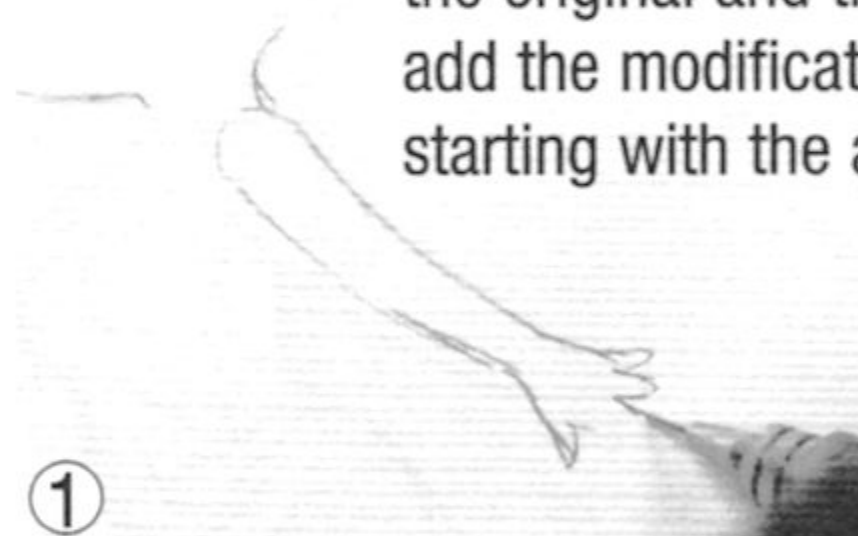
④ Final Image

Modified Version



Here, the arms and legs have been made slenderer and the hands and feet larger than in the original *chibi* drawing.

To modify the character, first trace the original and then add the modifications, starting with the arms.



Morita stylizes the shoes' form while maintaining the original design.

Morita has made the torso slenderer and the hands and feet larger than in the original *chibi* drawing, but he has not changed the direction faced or the angle in which she leans.

What Are Proportioning and Sketching?

Kazuaki Morita and Hikaru Hayashi

Characters constitute one of the most directly engaging elements in a work of *manga* or *anime*, and characters of various head-to-body ratios appear in media ranging from *jido manga*, targeted at children to *manga* targeted at adults and even government bulletins and public service announcements.

Kazuaki Morita and Hikaru Hayashi, star artists featured in *Sketching Super Manga*, discuss characters, proportioning, and sketching.



Tall proportions result in attractive characters.



Short proportions (as used for *chibi* characters) result in "cute" or "sweet" looking characters.

The Look of a Character and the Head-to-Body Ratio

How Proportioning Affects the Atmosphere Projected

Hayashi: You have drawn a wide range of characters from *chibis* to attractively built characters. Are you always thinking about the head-to-body ratio?

Morita: When I am just doodling or doing study sketches, I don't really think much about proportioning. The average

head-to-body ratio I use is probably 1:6 or 1:7, I guess.

Hayashi: What about when you are drawing a *chibi* or "super-deformed" character?

Morita: It can get tedious drawing the characters with the same proportions all the time for published work, so sometimes I might draw something with different proportions for myself—just for variety's sake. The head-to-body ratio does affect the atmosphere the character projects.

Hayashi: What do you mean by "atmosphere"?

Morita: Well, for example when I'm drawing a physically attractive character, I tend to make that character proportionally tallish. Short proportioning would give the character a "cute," "round," or "sweet" look.

Hayashi: So, the head-to-body ratio has the potential to alter completely the mood projected by the character. It basically means that the proportioning carries totally different connotations.

Morita: I suppose so. This is why when I need to draw a character for work, I first have to consider what type of mood the character will project and then decide the head-to-body ratio.

Matching the Face to the Proportions

Hayashi: When we photographed the figures for this book, I raised the topic of matching the face to the head-to-body ratio.

Morita: I remember. In my case, I start with the head and then add the neck and establish the torso's breadth. To a certain extent, their proportions are predetermined according to the target head-to-body ratio. Realistically speaking, it is impossible to give a 1:2 head-to-body ratio character a long neck and a shoulder width the same breadth as the head.

Hayashi: Do you ever receive job orders where a specific head-to-body ratio is requested?

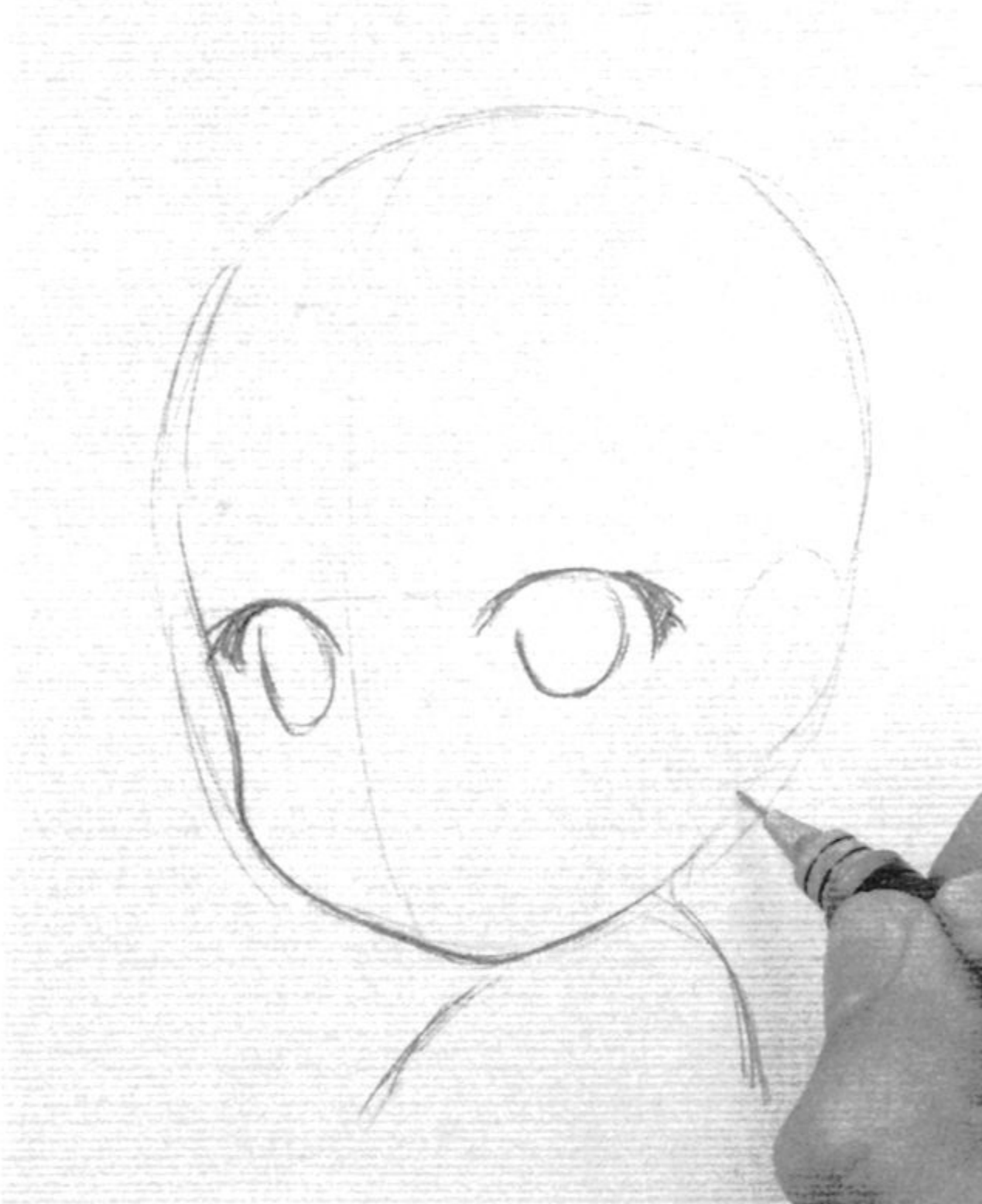
Morita: Well, I receive requests for characters of a specific age range, which necessitates drawing characters at a 1:5 head-to-body ratio or the like.

Hayashi:
So, the head-to-body ratio is a technique for expressing a character's age.

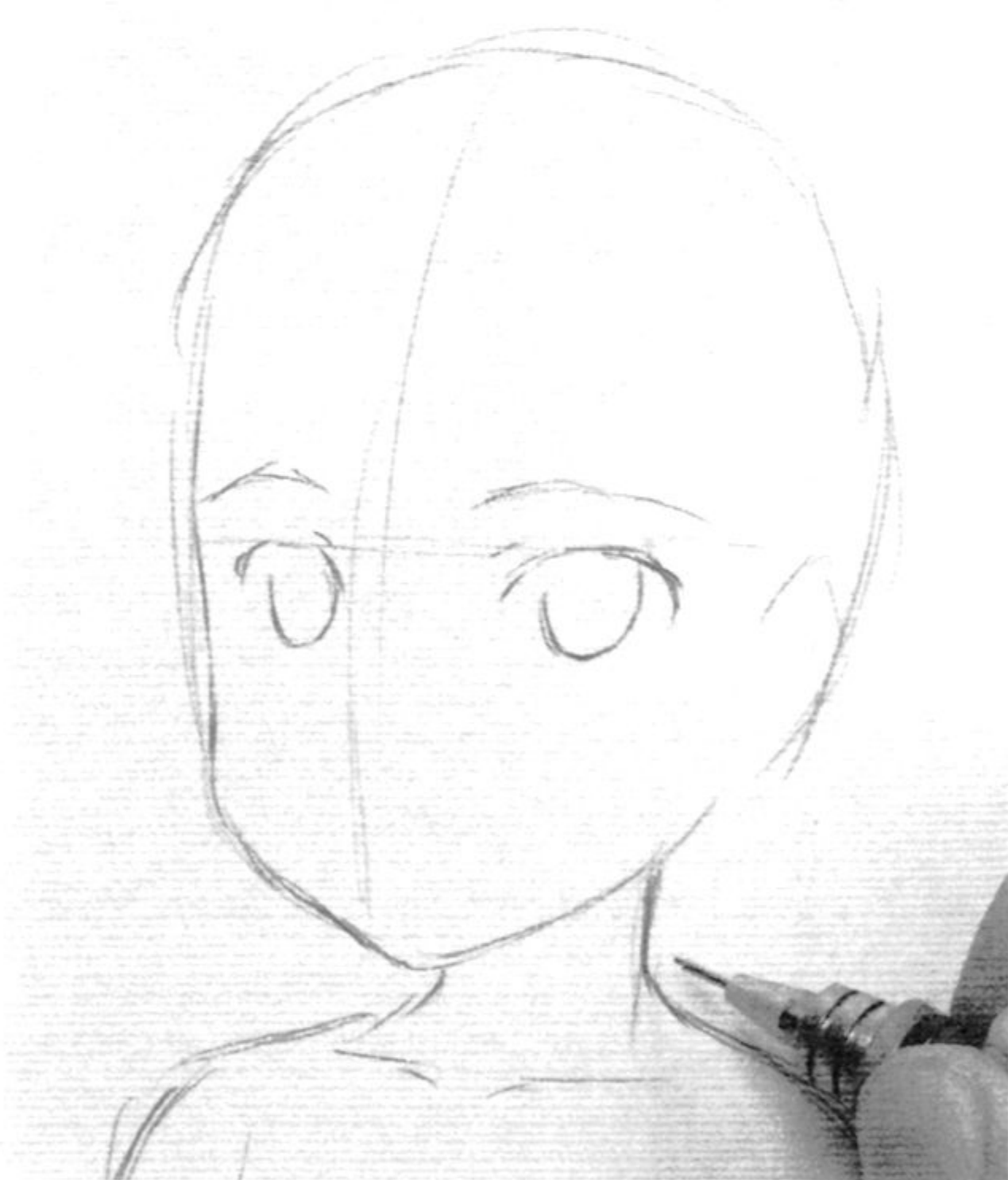
Morita: Absolutely. A character drawn at 1:4 head-to-body ratio will look like an elementary school student, while a 1:5 character will look like a junior high or high school student. If I want to make a high school student appear childlike, then I reduce the head-to-body ratio.

Hayashi: I suppose "matching the face to the proportions" could also be interpreted in that manner.

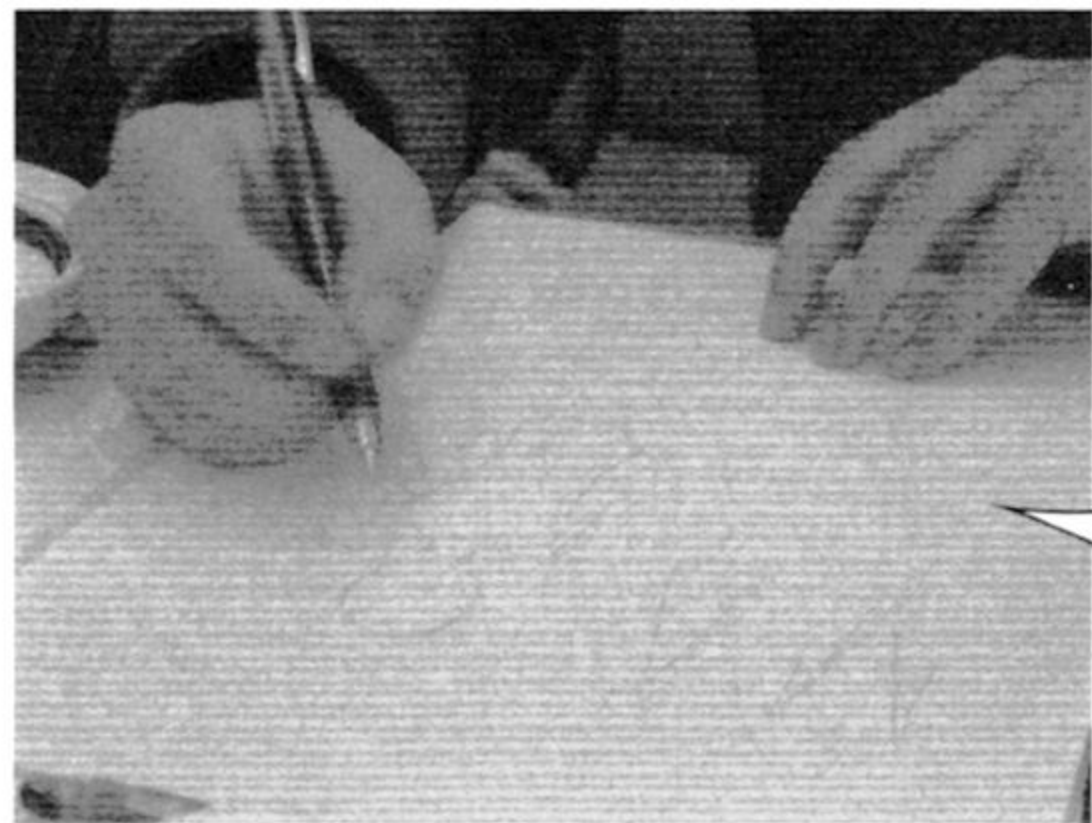
Morita: That's why I tell other artists first to plan what to draw and then actually to do the drawing.



Close-up of a 1:2 head-to-body ratio character



This close-up of a 1:4 head-to-body ratio character illustrates that its face, which matches its proportioning, is distinctly different from that of the character drawn at 1:2.



While doodling or making study sketches does not necessarily require taking head-to-body ratios into consideration, I do recommend that you maintain awareness of the proportional balance while you draw. I think learning various head-to-body ratios will help you gain a sense of how a character's body should be correctly proportioned.

Bird's and Worm's-Eye Views

Don't think of yourself as drawing a polygon character. The proportions only have to give the illusion of viewing the character from a given perspective.

Hayashi: Composing from a bird's or worm's-eye view creates a visually dynamic image, making these angles appealing. But, is there a special trick to drawing *chibi* characters effectively from a high or low angle?

Morita: *Sketching Super Manga* contains a discussion of methodology, namely composing the character within a box. This technique allows artists to draw characters of any head-to-body ratio.

Hayashi: It seems to me another effective technique would be to start by drawing the character in an easy pose and then trying to recompose that from either a high or low angle.

Morita: That sounds reasonable to me too. The key point is that you have to have a clear visual image in your mind. I should also point out that the character's head becomes proportionally small when composing from a low angle. This could make the overall proportioning look off. However, since you are not composing a polygon character, the figure simply needs to be drawn convincingly.

Hayashi: Do you have any tips on how to make a character look convincing?

Morita: Showing the soles of the feet, for example, underscores the sense of a low angle. The waistline is also effective in that you can use the waist of a skirt or pants to illustrate that the character is being viewed from a low angle. The circle-and-X face layout can be used when drawing either a *chibi* or a regularly proportioned character. If the face is

being composed from a low angle, then the layout design makes this obvious.

Next, I draw the eyes and then the ears go about here (c.f. figure to the right). The difference in height between the ear and the eyes creates the illusion of viewing the character from below. The positioning would be reversed if I were composing from a high angle.

I recommend the readers try drawing an informal orthographic sketch to study how the front and side of the character's face will appear from a given angle. Of course, the



Normally, the face is drawn first, but in a pose like mine, you would give the fist shape first and then the rest of me.

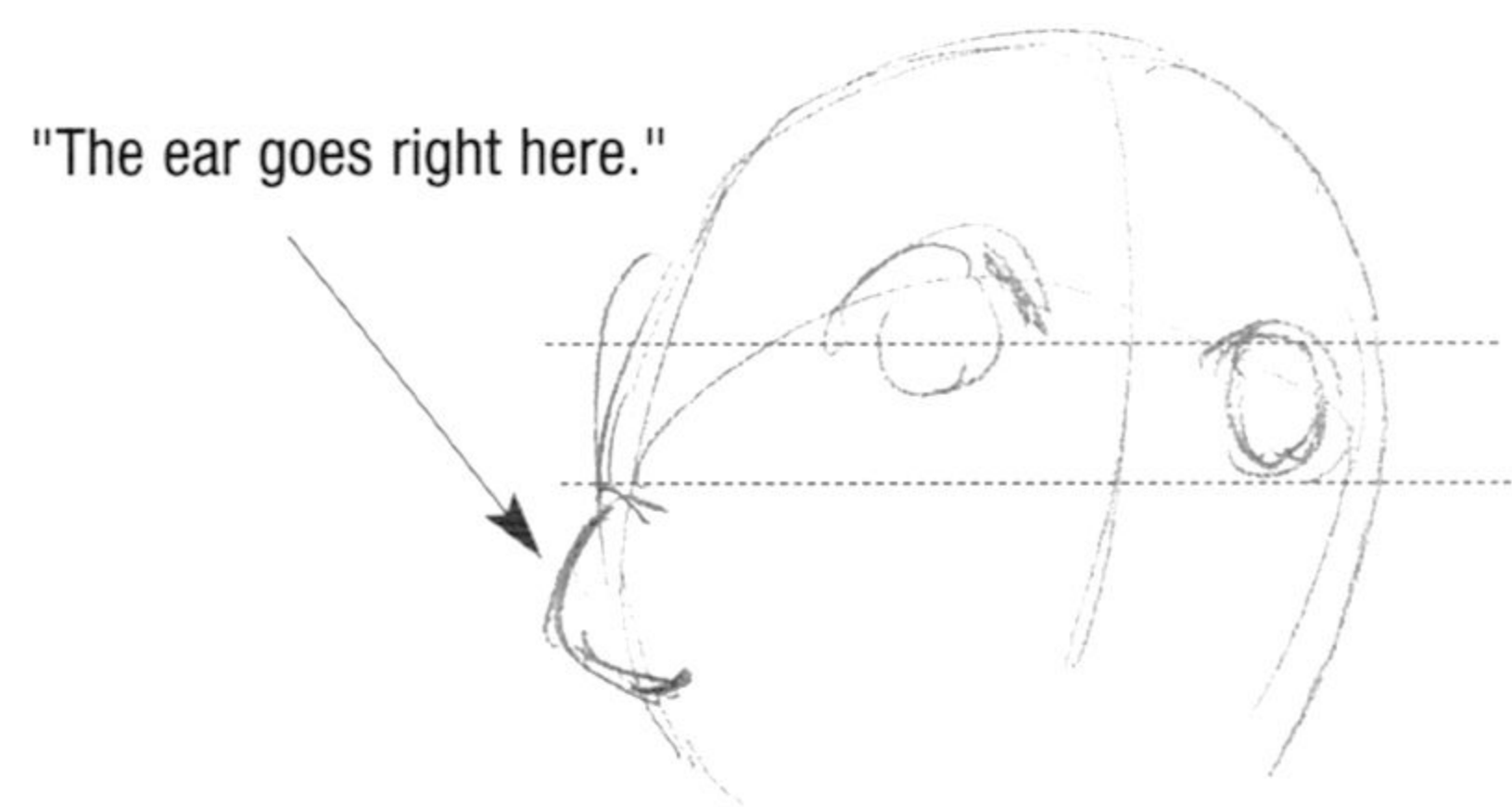
top of the head should be included.

Hayashi: What about the underside?

Morita: The underside would not be visible from a high angle. If drawing a three-dimensional model is too difficult, another option is to use a figurine or an artist's manikin as reference. You would also need to check that the face appears convincingly three-dimensional.

Hayashi: Basically, you are saying the character needs to be composed as a three-dimensional object.

Morita: Correct. This means drawing perspective lines would also make composing the figure easier. Knowing perspective drawing techniques is extremely helpful to artists.



The positioning of the eyes and ear create the illusion of a head viewed from a high angle.

The Character's Role and Proportioning

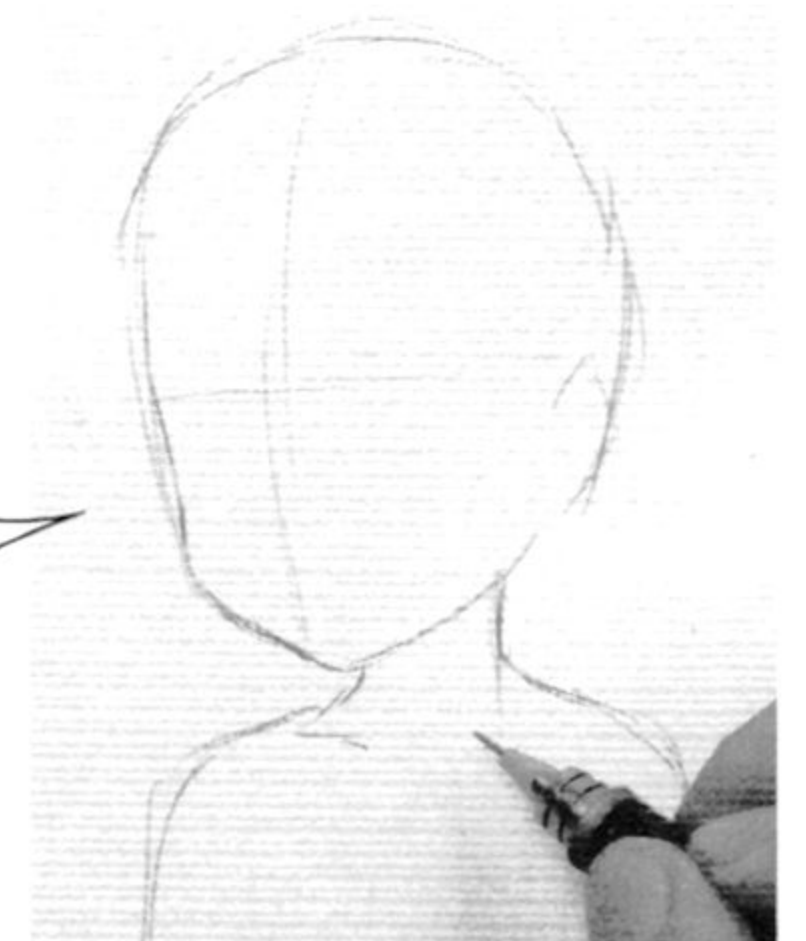
For Effective Drawing

Hayashi: Before embarking on the design, the artist decides beforehand whether or not he or she will be drawing a character with a "tall" head-to-body ratio or a *chibi*, ultra-stylized character. The artist then draws the head-to-body ratio accordingly. Are there any special tricks to proportioning?

Morita: Well, the more head-lengths comprising the character's full height, the more attention has to be paid to the individual body parts, while the fewer head-lengths making up the character's height, the more attention needs to be paid to the body as a whole.



Depending on the composition and pose of the character, the clavicle may be used as an alternative to the neck. It suggests the neck without having actually to draw it. It indicates to the viewer that the neck is connecting the head to the torso, causing the viewer to imagine the neck without it actually being visible.



I am referring to the volume of lines used to draw the character being in direct proportion to that character's head-to-body ratio. In other words, the fewer the head-lengths making up the ratio, the less lines the artist will use to draw that character. Consequently, having a visual image of the figure as a whole becomes an effective drawing strategy. On the other hand, the greater the number of head-lengths, the more attention needs to be paid to the size and shape of the individual body parts.

Hayashi: Often, artists correct their work as they draw or they might not notice while they are drawing that a particular part looks funny. In that regard, where should an artist pay particular attention when drawing?

Morita: In terms of the figure's proportioning, you should pay attention to the arms' lengths or the sizes of the hands and feet and fix them as necessary. Often a body part will seem inappropriately sized. It's also important to set the drawing aside for a few hours or even an evening and then go back and look it over.

The Effect of the Silhouette

Hayashi: Last, I'd like to talk a little about designing and creating roles. The head-to-body ratio is determined according to the impression the character needs to project. However, is there ever a case where you might use a *chibi*-type ultra-abstracted style for a "tall" head-to-body ratio character?

Morita: Well, when I'm doodling or drawing study sketches, I might draw a figure with a "tall" head-to-body ratio and then stylize the character to give it a gentle, sweet atmosphere. But this makes drawing the character extremely difficult. I

might be able to achieve the right facial expression, but the figure's silhouette is particularly important in character design, so mismatching drawing style with the proportioning throws a big curveball.

Hayashi: By silhouette, do you mean the first impression the viewer gets just by glancing at the character?

Morita: Yes. For example, a character with an inverted triangle torso projects an impression of physical might, while a triangular torso suggests a soft, feminine character. I design the shape of the character's torso based on the impression it will elicit.

Hayashi: Using an inverted triangle or a triangle as the torso's basic shape is essentially referring to the shoulder width, isn't it?

Morita: Naturally, I mean the shoulder width as well as the clothing (in other words, the presence of shoulder pads, etc.). The silhouette's shape doesn't necessarily have to be dictated by the shoulder width. Other clothing elements control the atmosphere projected as well. Perhaps the collar forms a triangle or inverted triangle. Ponchos project a gentle mood. Different clothing articles can have a tremendous impact on the impression projected.

Hayashi: So this means that it is important to know how to draw clothing.

Morita: Right. It is vital to have basic knowledge of clothing structure, etc. However, if you can't draw a body properly, there is no way you will be able to draw clothing.

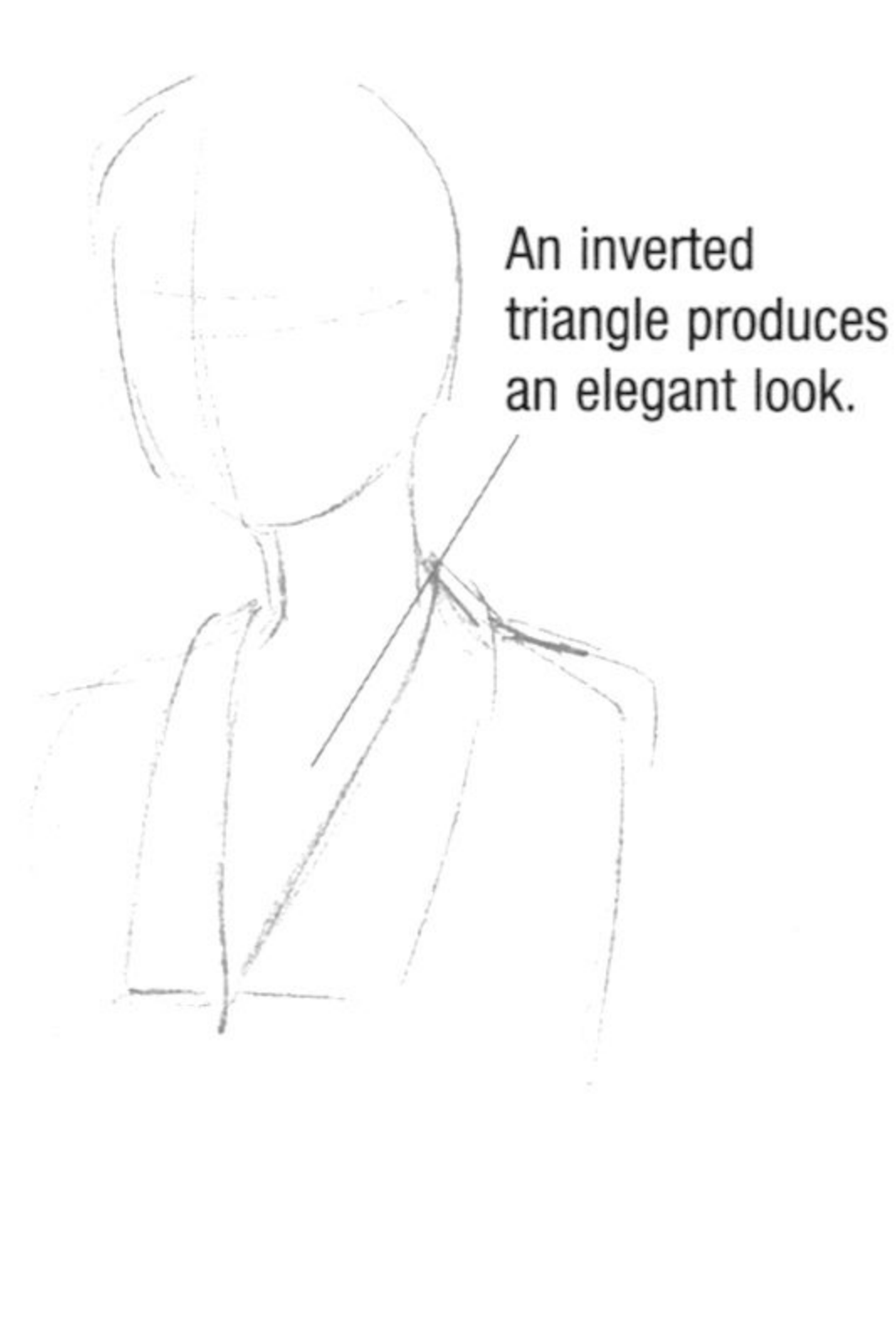
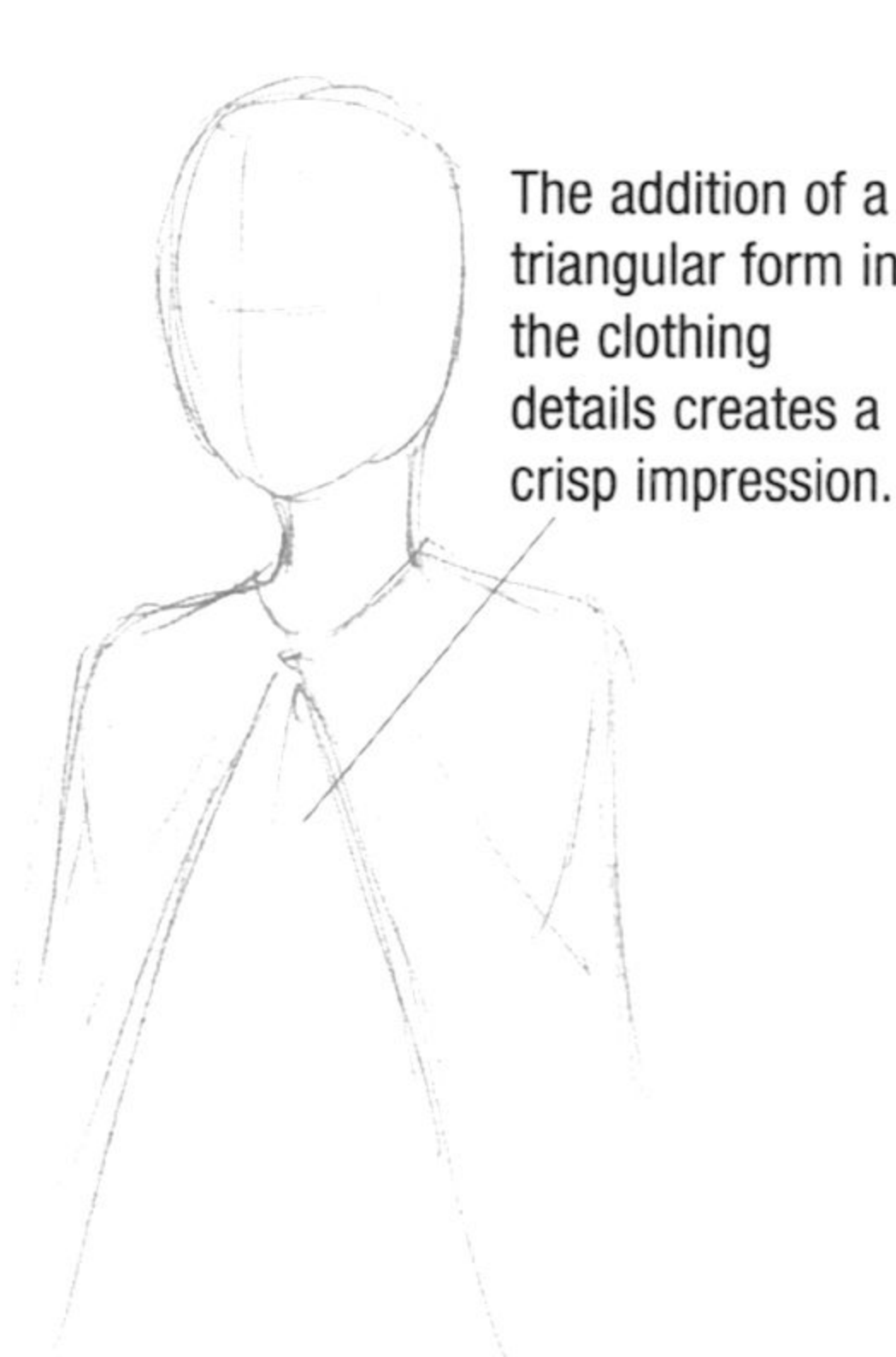
Hayashi: Sketching essentially means going back to the very basics, doesn't it?



A triangle is the quintessentially feminine silhouette form. An inverted triangle might be used to suggest a woman or girl with shoulder pads, but a triangle silhouette is used strictly with female characters.



An inverted triangle is the conventional shape used for a male character. This silhouette generates a "domineering" or "strong" atmosphere.



Three Key Phrases in Improving Sketching Skills:

Revealed in Our Artist Tête-à-Tête

Key Phrase 1:

Great-looking bodies remain great-looking, even if the clothes they wear aren't

A physically attractive character can make even unattractive clothing articles look good. (Morita)

It is a fact that hairstyle and clothing have a tremendous impact on the atmosphere a given character projects. However, hairstyles and clothing are ultimately details. Insisting too much on decking out a character in stunning details often results in the artist neglecting the design of the character, himself.

The basic axiom of drawing or character design is to pay attention to the character as a whole. Think about what type of character you intend to draw, decide how the character should look, and then begin drawing. Naturally, you should always be aware of this basic axiom and avoid festooning the characters you design with too many eye-catching details.



In the case of a character projecting a sweet or adorable atmosphere, the wardrobe and other details may affect an abundance of factors.

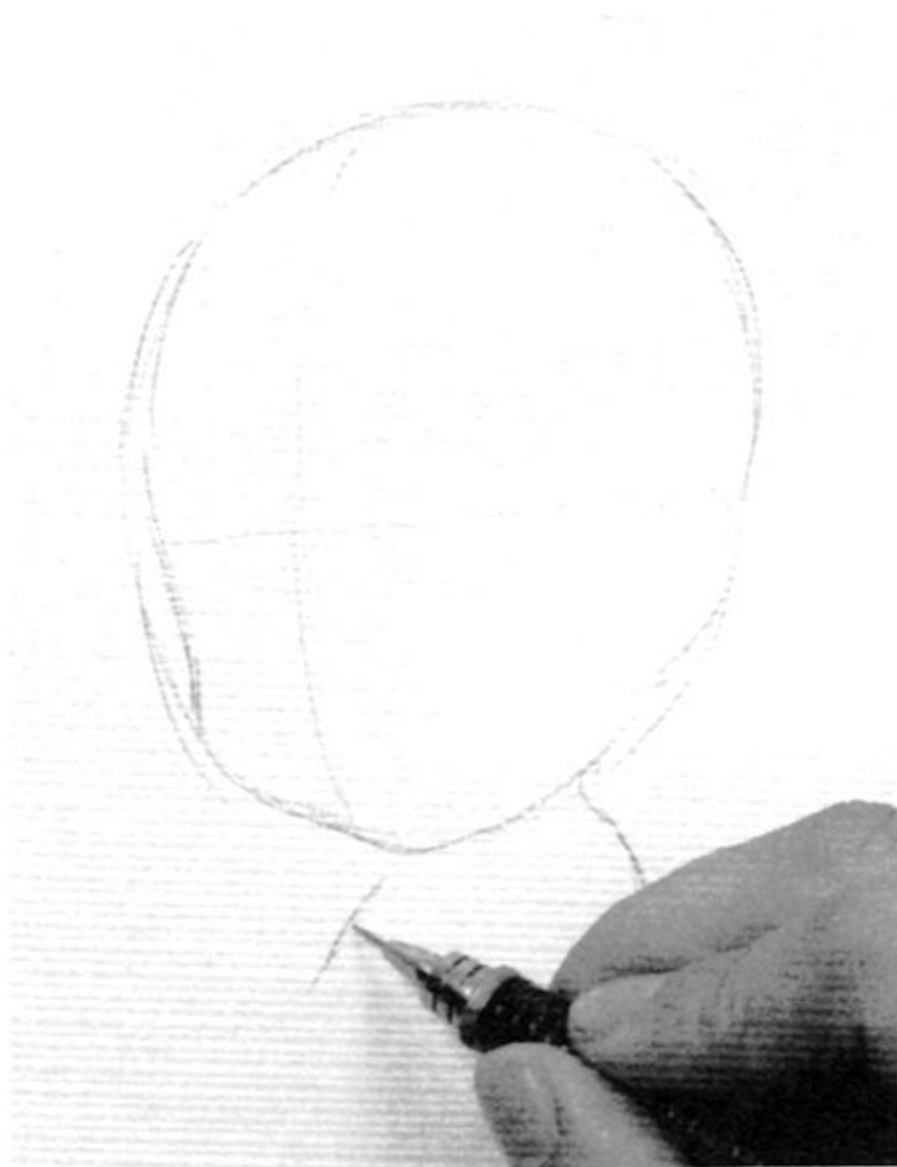


I'll take the fried rice lunch set.

Key Phrase 2:

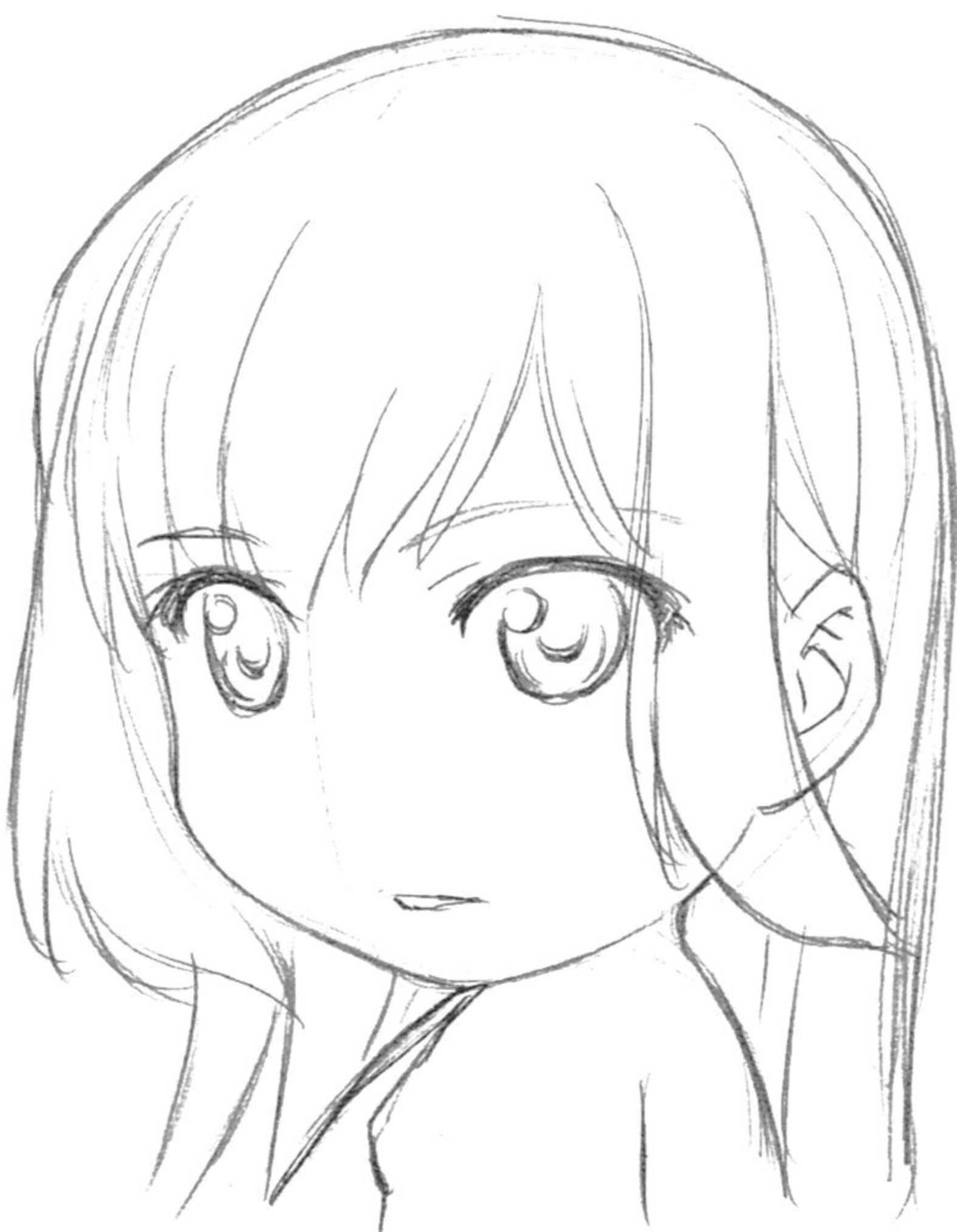
A bust close-up alone can suggest the character's proportioning.

A bust close-up (close-up of the head and shoulders) can indicate the figure's head-to-body ratio. (Morita)



1:2 Head-to-Body Ratio

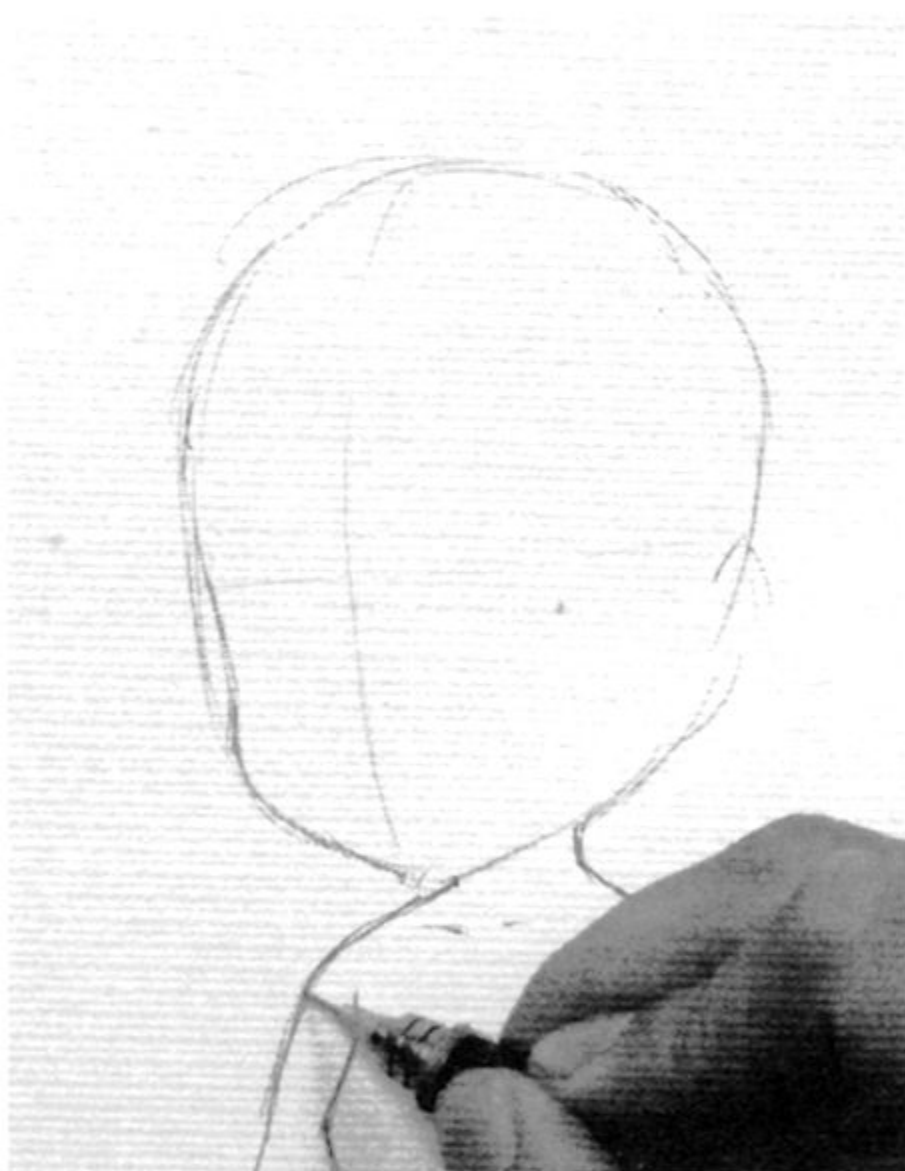
Character with de-emphasized bone structure



The head displays an essentially round silhouette. The curling locks of hair have been abstracted.

The neck is just barely visible. Often, artists omit the neck on characters of this style.

Key features of this style are the narrow shoulders that directly touch the neck.



1:3 Head-to-Body Ratio

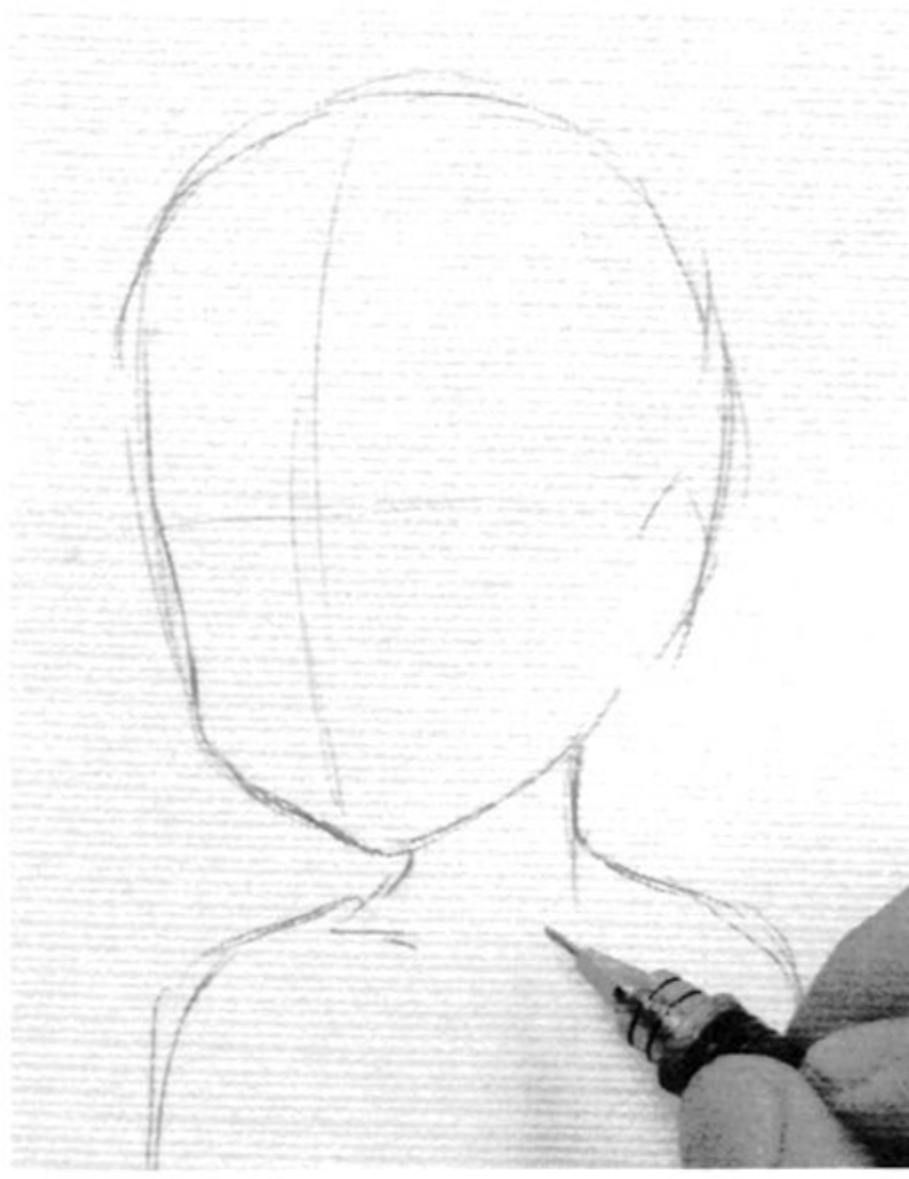
Character with moderately defined bone structure



In the version to the left, the hair's form is reflected in the head's silhouette, and the contours of the curling locks have become slightly more detailed.

The neck has slightly more presence than the above version. However, rather than having a realistic thickness, this style of character often still has a narrow neck.

The distance between the neck and the shoulder joint has increased.



1:4 Head-to-Body Ratio

The bone structure slowly takes form. This style of character requires the artist to show more attention toward a realistic portrayal.



Characters with a 1:4 proportioning have a more realistic appearance. The hair is rendered in more carefully and in more detail.

The neck is more visually prominent.

The shoulders are approximately the same width as the head, and clavicles have been drawn. Artists typically use 1:4 head-to-body ratio characters for children between 10 and 15.



1:7 Head-to-Body Ratio

These characters' figures are based on the underlying skeletal structure.



Characters with this proportioning appear increasingly real, and the face becomes elongated.

The neck is clearly delineated.

The shoulders should be approximately the head's width or broader. In the case of female characters, aim for approximately 1.5 times the head's width. This is the proportioning used with adult characters.

Face: The head-to-body ratio affects the proportioning and degree of abstraction or stylization of the facial features (exterior contours, eyes, nose, etc.). Consequently, the artist is able to indicate to the viewer whether the character is a *chibi* or not with the face alone. You will find your character design range has expanded once you have established your own approach to the face according to whether the character is

drawn at 1:2 or 1:3, etc.

Body: The neck and shoulder width to a certain extent predetermine the torso's size. Therefore, the inclusion of the neck and the shoulder-width alone are able to hint at the character's overall proportioning.

Key Phrase 3:

Failure is key to mastery.

Learning from mistakes is the best way to improve. Without a little failure and pain, your skills won't get better. This is a case where stubbing your toe will make you more graceful. (Morita)



When an artist draws, he or she thinks about what the subject should be and how to compose the subject. An artist might consider the context of the scene and what should be visible or present in the composition as a result. With this approach, blunders and missteps the artist experiences lead to improvement. However, what is vital is to continue playing around and experimenting and not to give up.



The Basics of Proportioning



If we take a look at figure proportioning, we realize that all characters may be categorized as having either "attractive" proportioning or "cute" *chibi* proportioning. In this volume, attractive head-to-body ratios will be referred to as "attractive proportioning," while *chibi* head-to-body ratios will be referred to as "*chibi* proportioning."

Chibi characters, which frequently appear in single panels, cutout frames, and multiple-panel *manga* have proportions that make them appear affable or endearing. However, *chibi* designs actually indicate that the designing artist was aware of proportioning and distilled the body's various components down to their essences as appropriate to the head-to-body ratio selected.

After lightly touching on the basic proportioning of an attractive character, this character will cover in comprehensive detail the fundamentals of selecting the head-to-body ratio through discussion of *chibi* character proportion sketching.

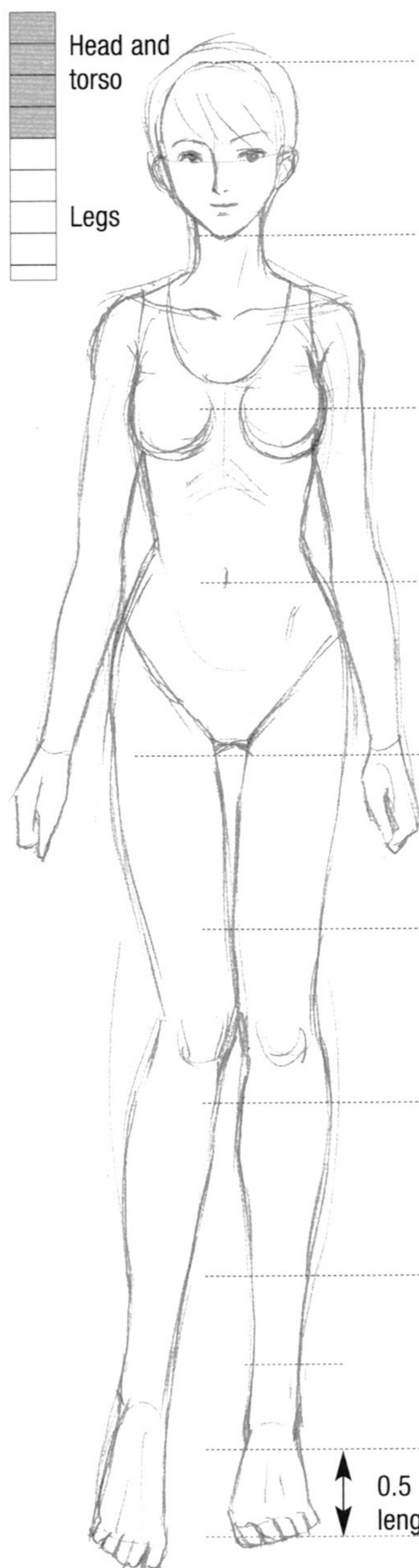
The Head-to-Body Ratio and Proportioning

This section covers the standard head-to-body ratios used for attractive proportioning and cute *chibi* proportioning.

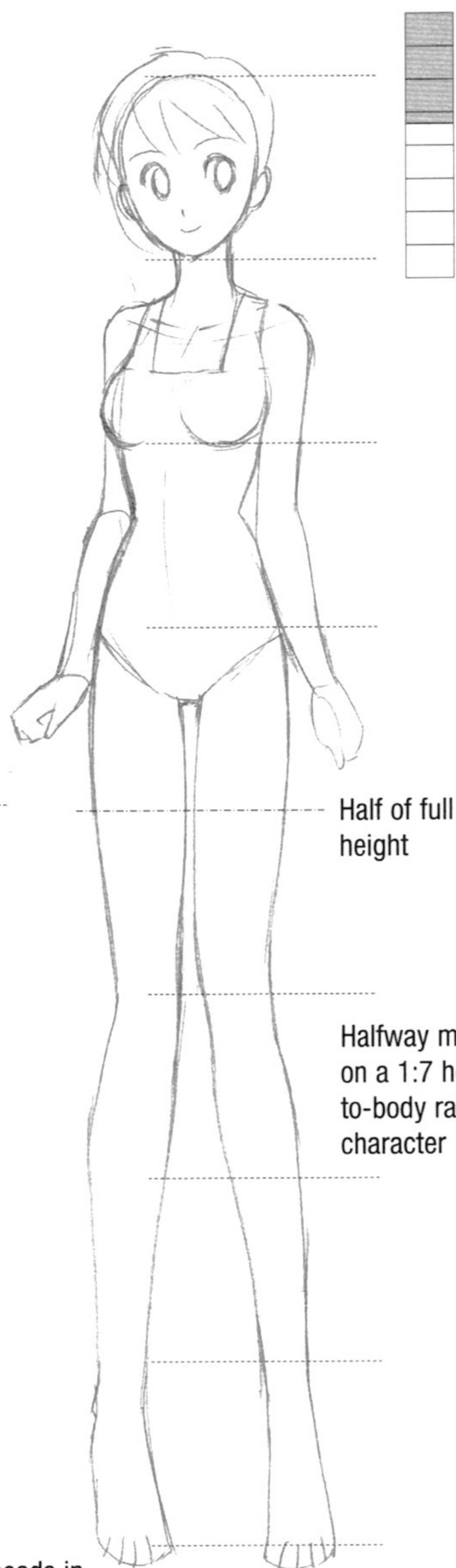
Attractive Proportions: 1:8.5 to 1: 5 Head-to-Body Ratios

The distinguishing features of attractive proportioning are long legs. Therefore, the groin should be positioned either at or slightly above the halfway mark so that the legs make up half of the body's full height or longer.

1:8.5 Head-to-Body Ratio

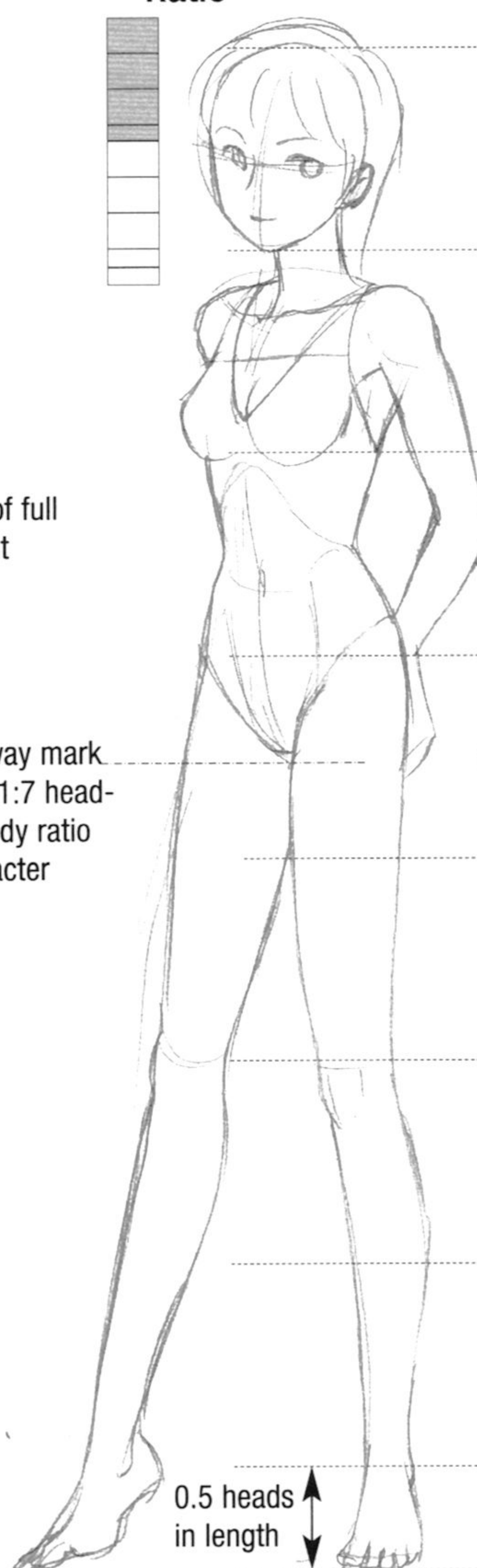


1:8 Head-to-Body Ratio

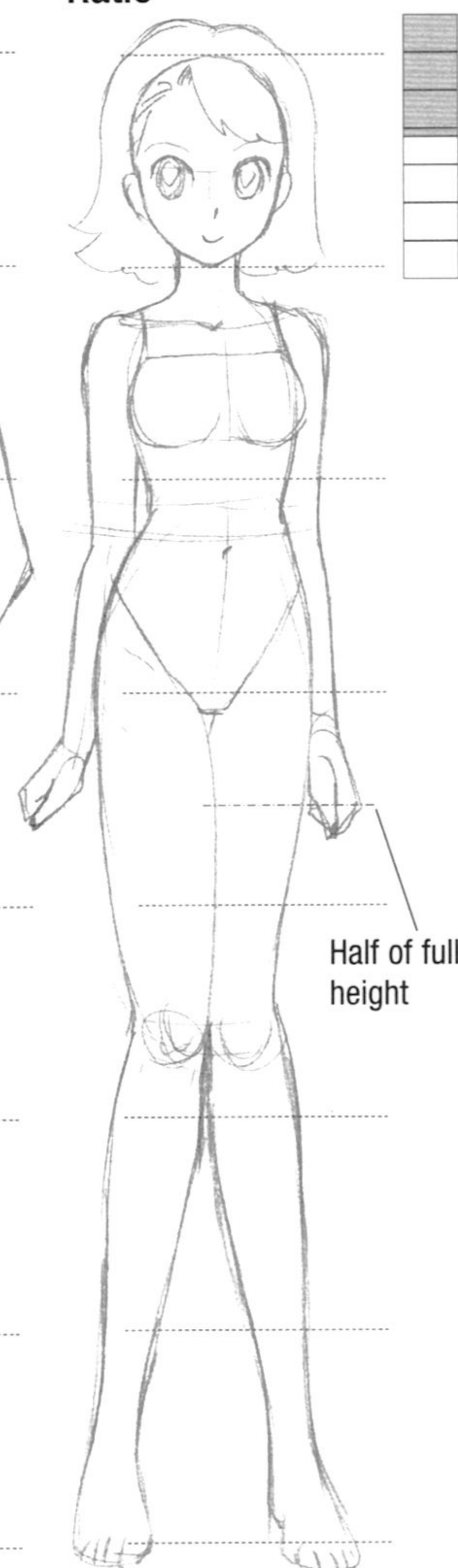


Head and torso
Legs

1:7.5 Head-to-Body Ratio



1:7 Head-to-Body Ratio



1:8 reflects a model's build. The neck is long; the shoulders are broad, befitting an adult character. The face seen on the above character is suited toward realistically drawn characters.

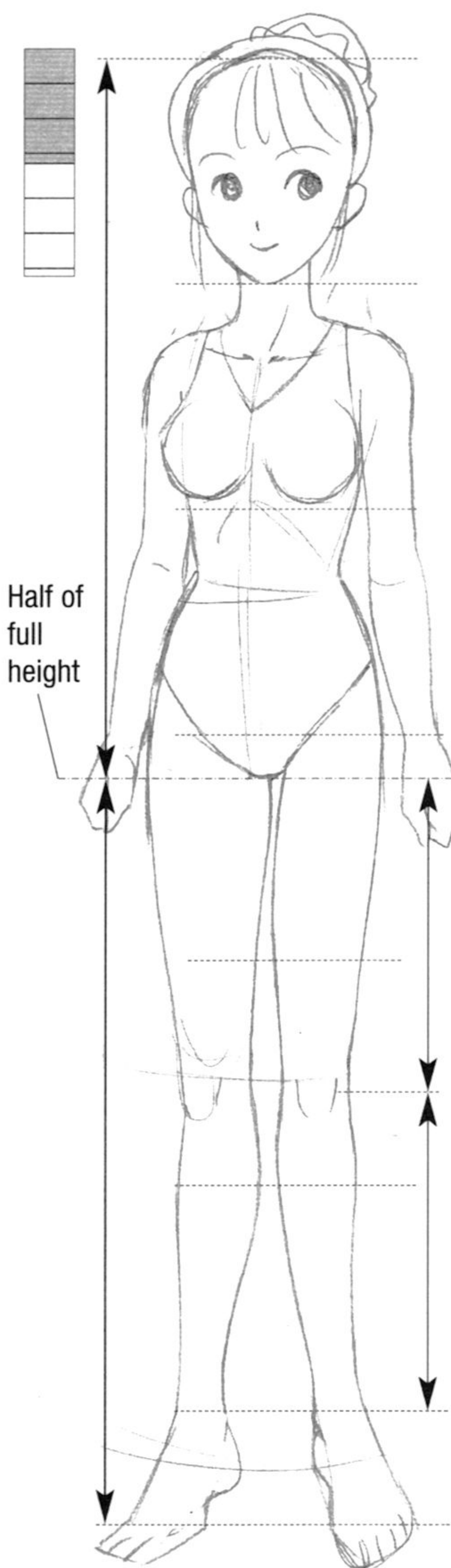
To create the character above, the groin and waist were shifted higher along the body, thereby shortening the torso. The face is drawn in a *manga*-esque style, which suits this character. This character's legs are about one head's length longer than they should be, making her inappropriate for action scenes.

To create a 1:7.5 character, draw a standard 1:7 proportioned character, and then add an extra 0.5 head's length to the legs. This creates a pleasingly proportioned, long-legged character.

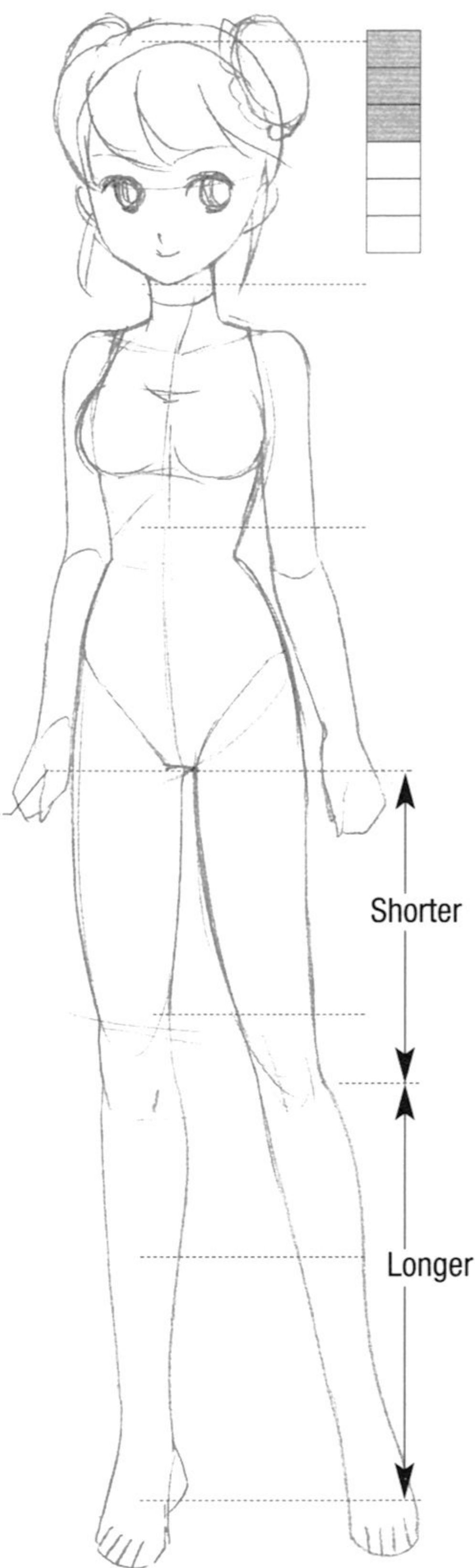
The above shows a character drawn with the groin positioned 0.5 head's length higher than on a standard 1:7 character, causing the torso to shorten. The result is a long-legged, charmingly designed character.

1:6.5 Head-to-Body Ratio

1:6 Head-to-Body Ratio



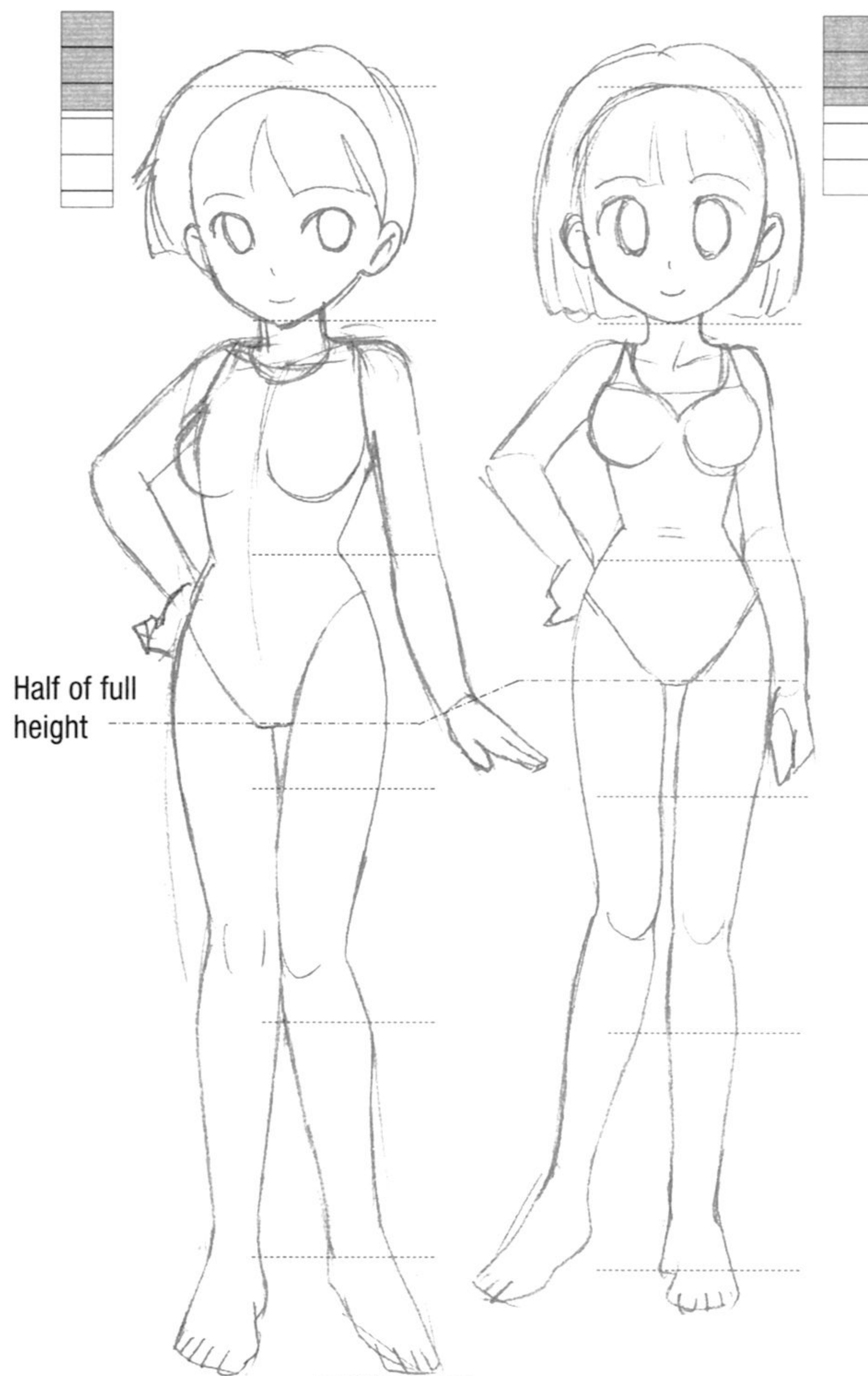
With this head-to-body ratio, the shoulders become narrow, and the torso shortens, generating a sweetly endearing atmosphere. Positioning the knees halfway along the knees makes the legs appear short.



In the above, the chest, waist, and groin have been raised, lengthening the legs. Positioning the knees higher along the legs and shortening the length from the knee down creates physically attractive proportioning.

1:5.5 Head-to-Body Ratio

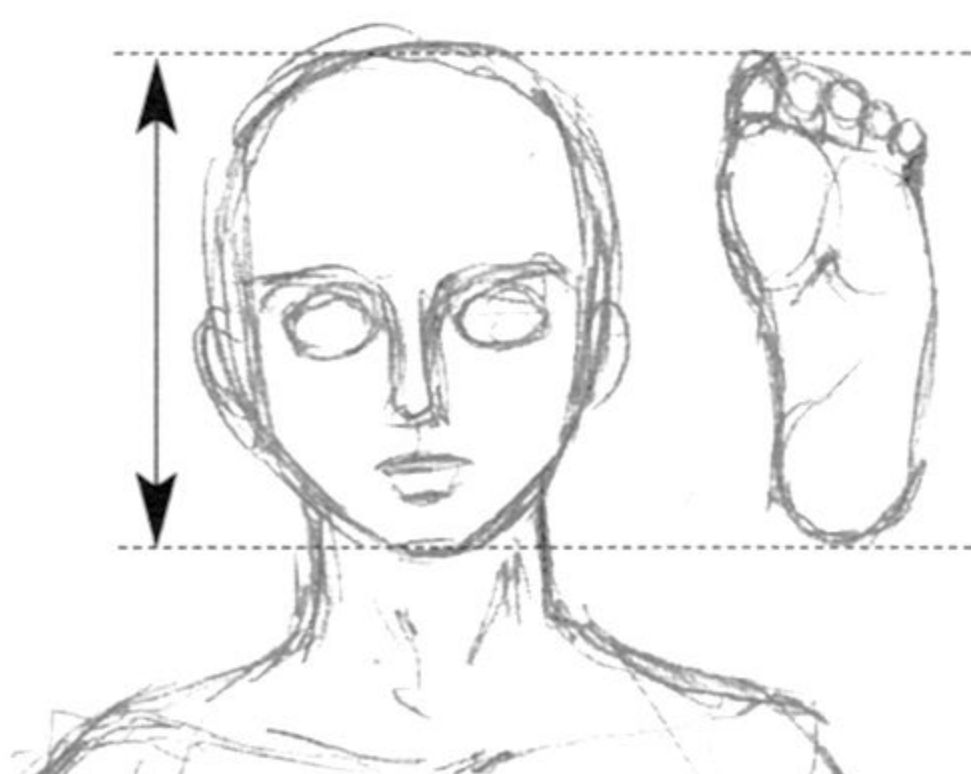
1:5 Head-to-Body Ratio



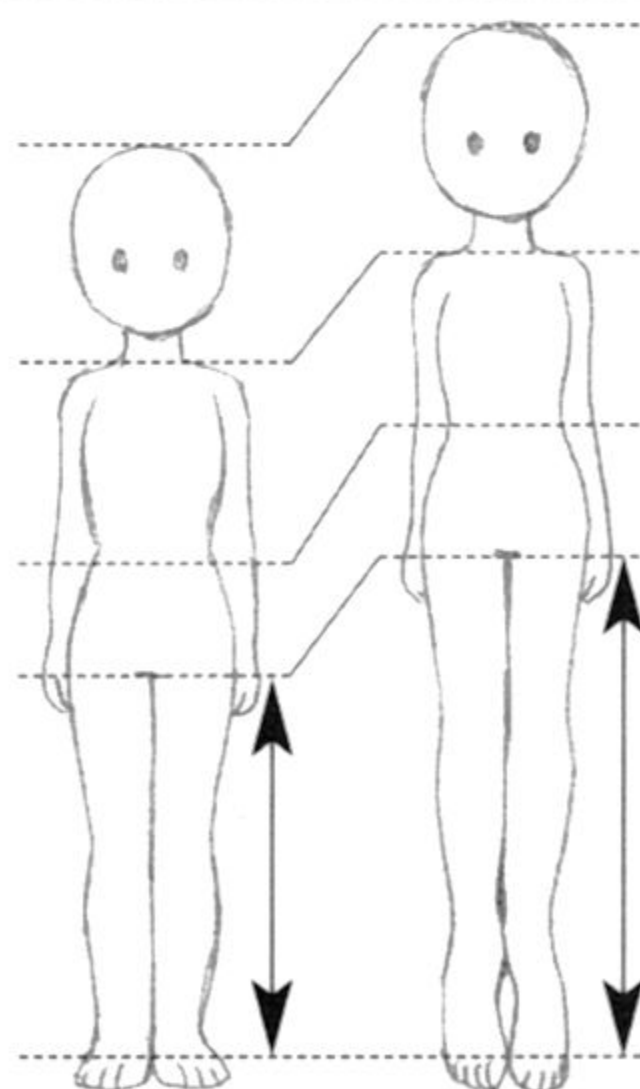
The 1:5.5 proportioned character's overall figure appears well balanced, even with the groin positioned halfway along her full height.

On a 1:5 character, positioning the groin halfway along the full height creates the appearance of a moderately long-legged figure.

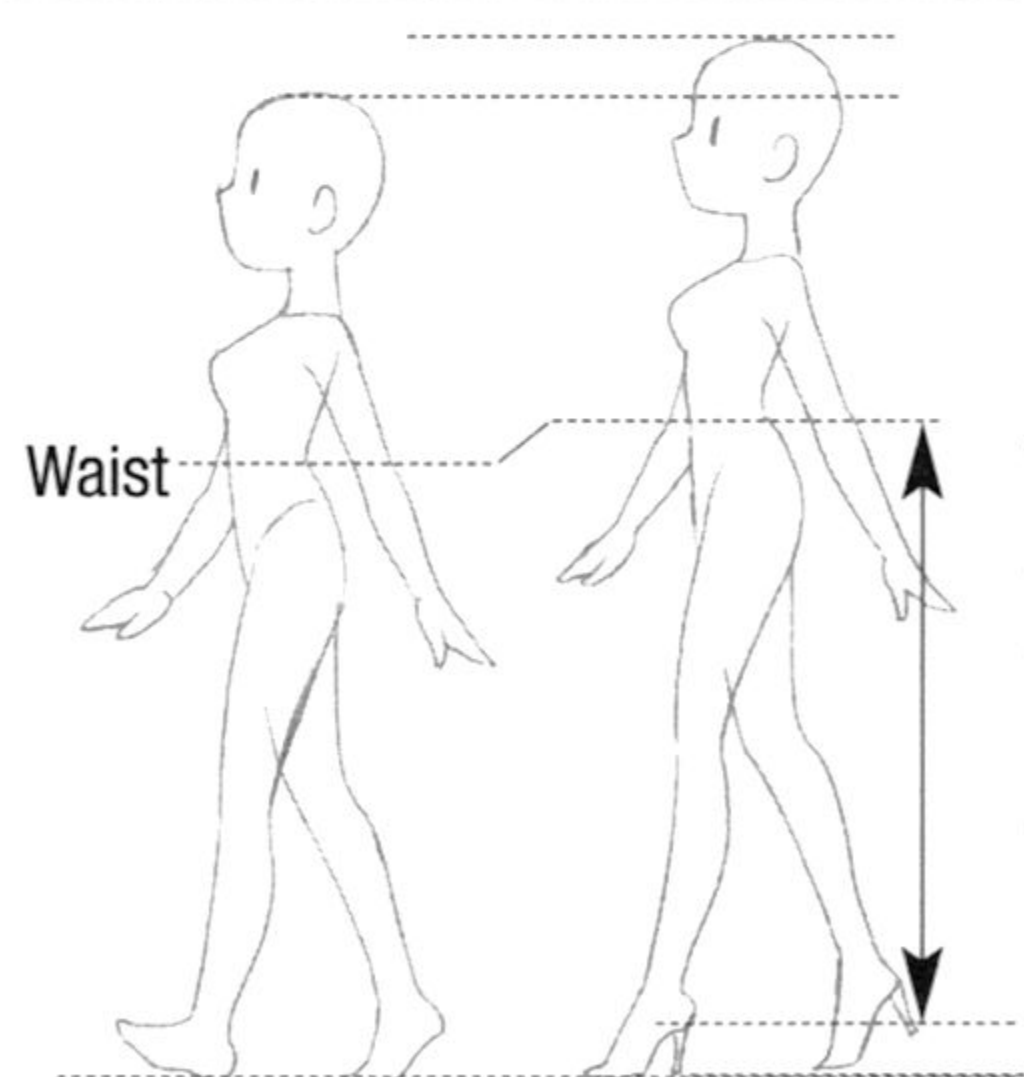
Foot Size and Height



The feet should be about the same length as the head.



When standing on the tips of their toes, the legs become longer by approximately one head in length, making the full height taller.



The waist rises exactly the same height as the heels, and the character's full height lengthens accordingly.

The same character appears to change in height depending on whether or not she is wearing heels. With the heels her legs become longer, causing the character's overall proportioning to change as well.

Creating Variations for 1:5 Head-to-Body Ratio Characters

The proportioning of a 1:5 head-to-body ratio is easy to modify, and possible variations for characters drawn at a 1:5 ratio are endless. This head-to-body ratio also lends itself readily to *manga* characters and can be smoothly adapted to the target readership or to the setting of the given work of *manga*.

Standard Proportioning

Long Torsos

Diagram illustrating five variations of female characters with a 1:5 head-to-body ratio. The sketches are arranged horizontally, with vertical lines indicating key proportions: Waist, Half of full height, and Full height. The first three sketches are labeled 'Standard Proportioning' and the last two are labeled 'Long Torsos'.

This build is commonly found on dolls. The distinguishing features are pole-like arms and legs.

The arms, legs, and torso on this figure with attractive proportioning reflect that of a real human being.

Accentuating the curves creates a build suited to attractive female characters.

This build consists of understated curves and a trim silhouette, making ideal for a character in her early teens.

Lowering the groin's position produces a long torso. This build produces a strong childlike atmosphere.

Standard Proportioning

Long Legs

Long Torso

Diagram illustrating five variations of male characters with a 1:5 head-to-body ratio. The sketches are arranged horizontally, with vertical lines indicating key proportions: Waist guidelines, Half of full height, and Full height. The first two sketches are labeled 'Standard Proportioning', the third is labeled 'Long Legs', and the last two are labeled 'Long Torso'.

This is the male version of the doll-like build. The musculature in the chest and other body parts is de-emphasized.

Accentuate the muscles and joints to create attractively proportioned male figures, like this.

This is the male version of the curvaceous female above. The figure's exterior contours are accentuated with some muscle definition added.

Give male characters in their early teens slim torsos (especially the waists) and legs, like the one shown here.

Give male figures with long torsos an overall feeling of roundness in the trunk and legs, like the one shown here.

Further Variations on Figures with the Same Head-to-Body Ratio and the Same Proportioning



Botticelli
Birth of Venus (Nascita di Venere)
1484, Italy
Located in the Uffizi Gallery

Conceptions of what constitutes ideal beauty changes through time and from country to country. When Botticelli painted *Birth of Venus*, he gave Venus, the goddess of love, a 1:8 head-to-body ratio and proportions reflecting the 15th century's ideal beauty. However, if Botticelli had painted his work today, in the 21st century, would he have given her the same body? This page shows Venus drawn with same 1:8 head-to-body ratio and the same face, and with the waist and groin positioned as they are in the original but with a body more representative of the 21st century ideal.

Ideal Proportions of the 15th Century Beauty

Ideal Proportions of Today's 21st Century Beauty



Thickish neck

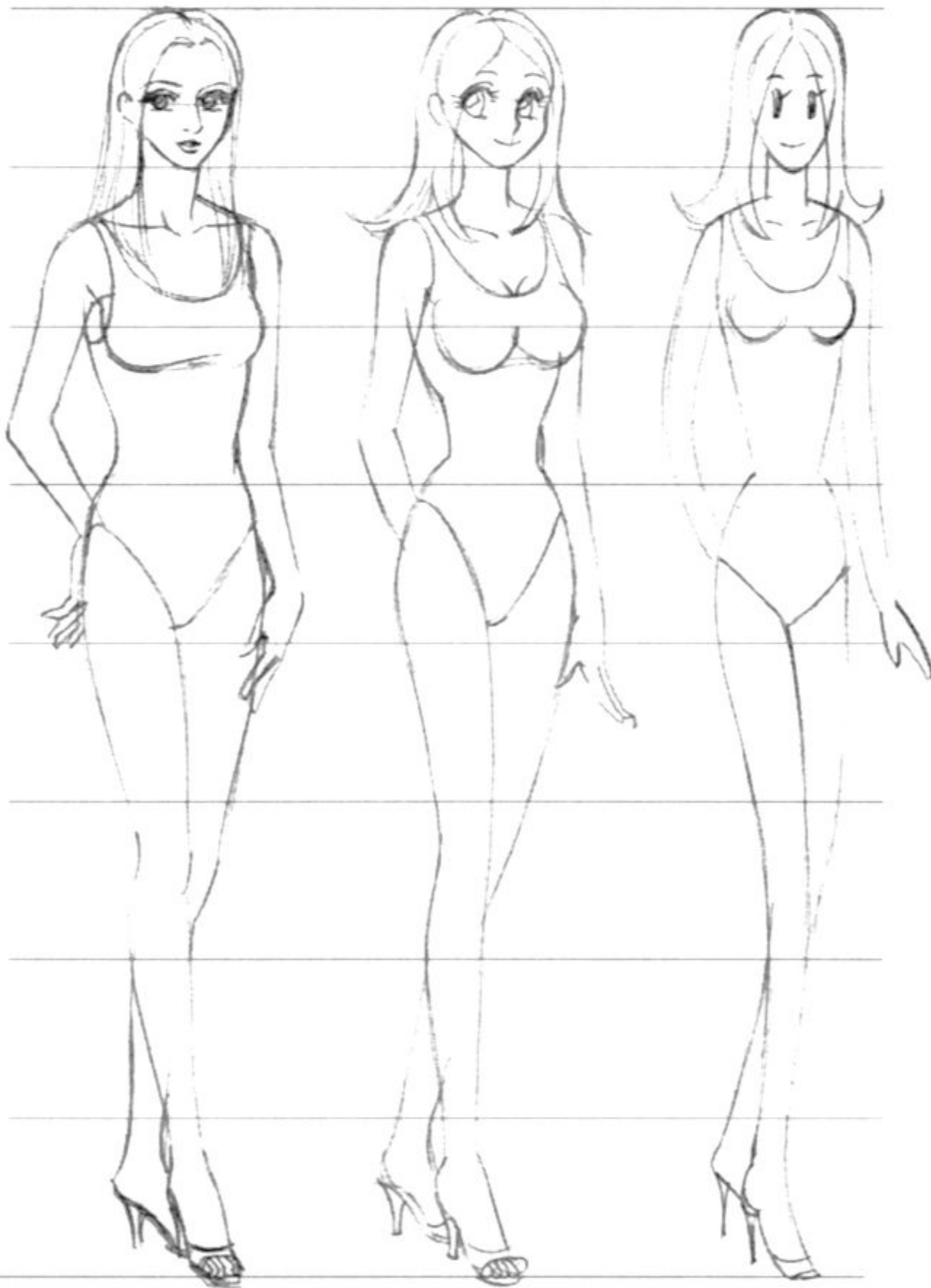
Sloped shoulders

Slender neck

Squared shoulders: The skeletal structure and musculature of the ideal 21st century woman should be accentuated.

Stylization and abstraction may be used to produce completely different types of characters, even if they share the same head-to-body ratio. Differences in which aspects of the figure that are emphasized or stylized reflect differences in the tastes of the day.

Distinguishing Characters



Realistic

Manga-esque

Character used in advertising

The neck, arms, waist, legs, and figure overall are plump, and the musculature is understated.

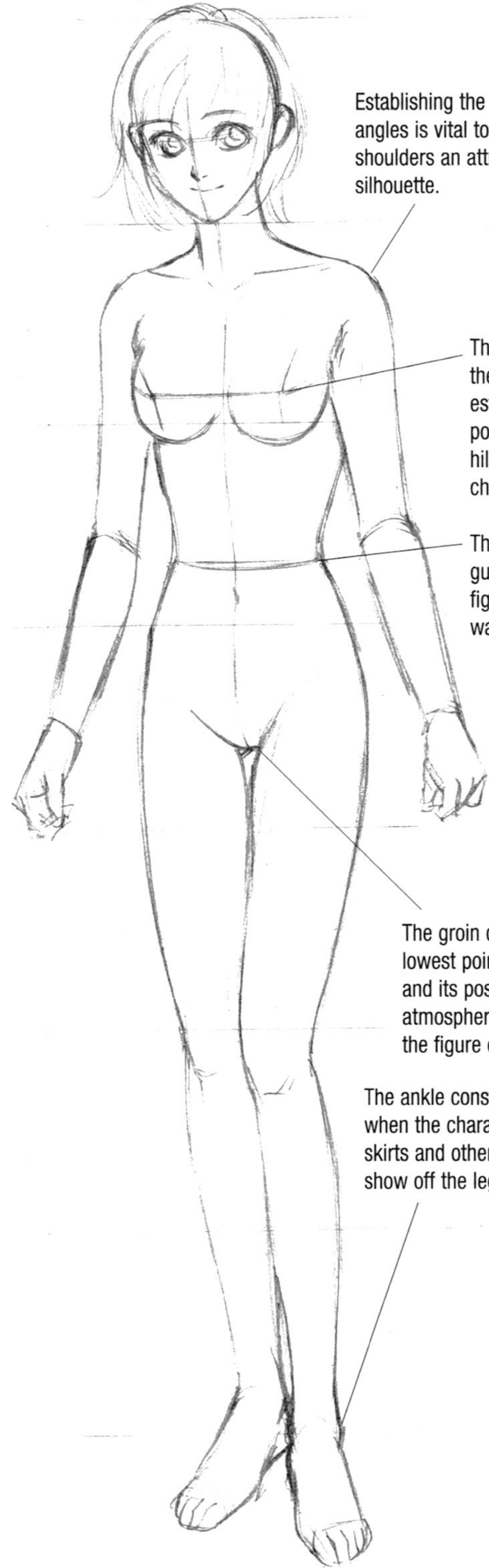
The entire figure, including the neck, arms, waist, and legs are approximately one-third slenderer than those of the ideal 15th century woman, while the musculature and skeletal structure are emphasized.

First, sketch the figure nude and then draw the clothing over it.

Drawing the Character Nude

While there is no need to draw the figure realistically, the following key points should still be carefully noted.

1:7 head-to-body ratio



Establishing the shoulders' angles is vital to giving the shoulders an attractive silhouette.

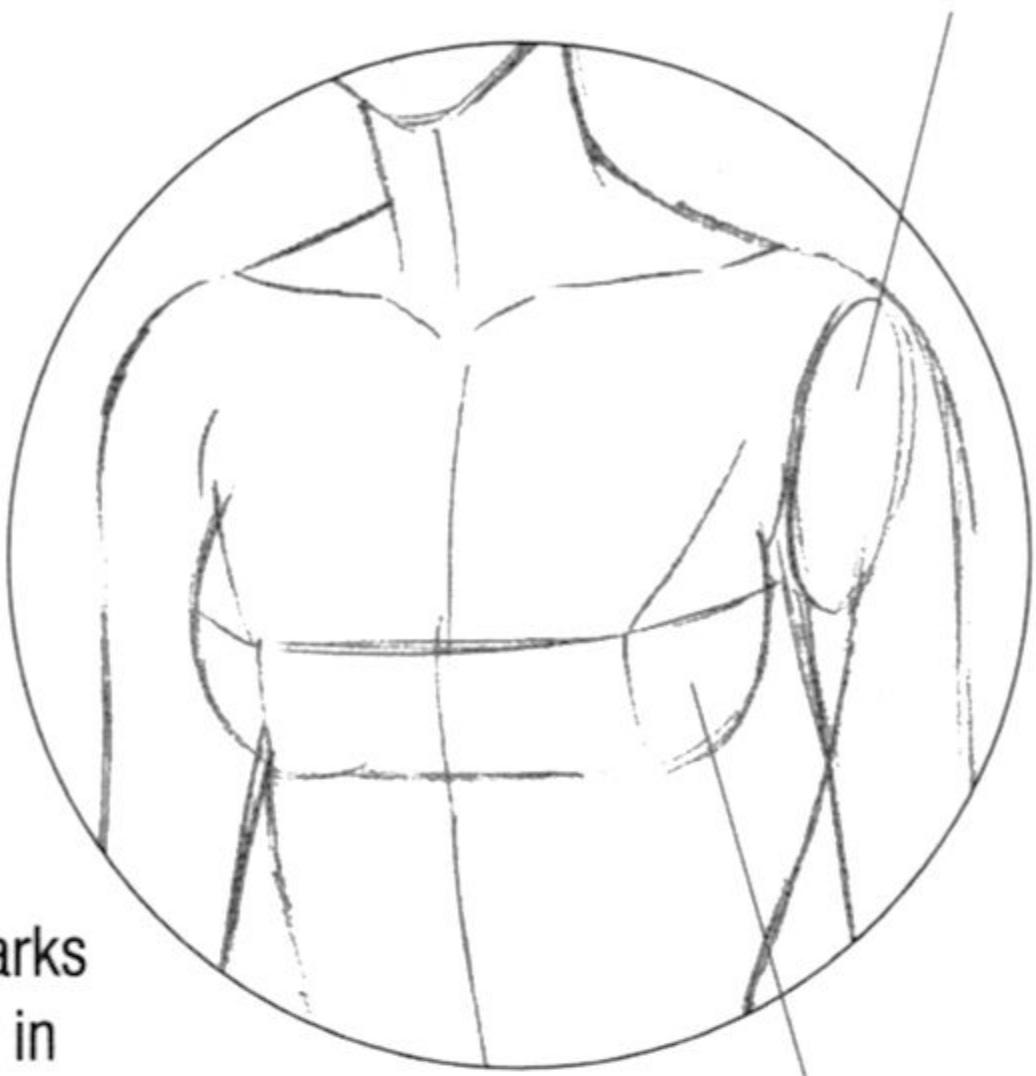
The areoles' position marks the bustline, a key point in establishing the underarms' positions and portraying hills and valleys in the chest's form.

The waistline functions as a guide when drawing the figure's actual waist or the waist of a skirt or pants.

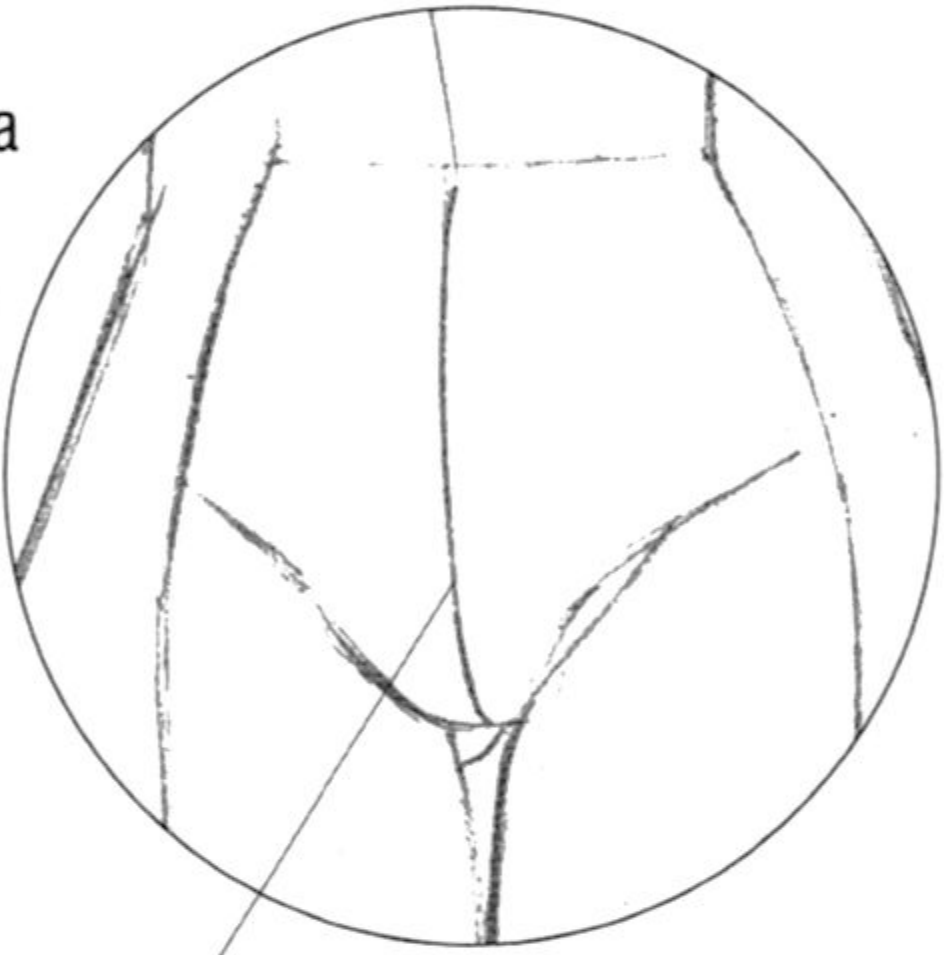
The groin denotes the lowest point on the torso and its position affects the atmosphere projected by the figure overall.

The ankle constitutes a key point when the character is dressed in skirts and other garments that show off the legs.

Use an ellipse to draw the juncture where the shoulder meets the arm.



Rendering the chest using abstracted, geometric forms facilitates capturing it as a three-dimensional form.



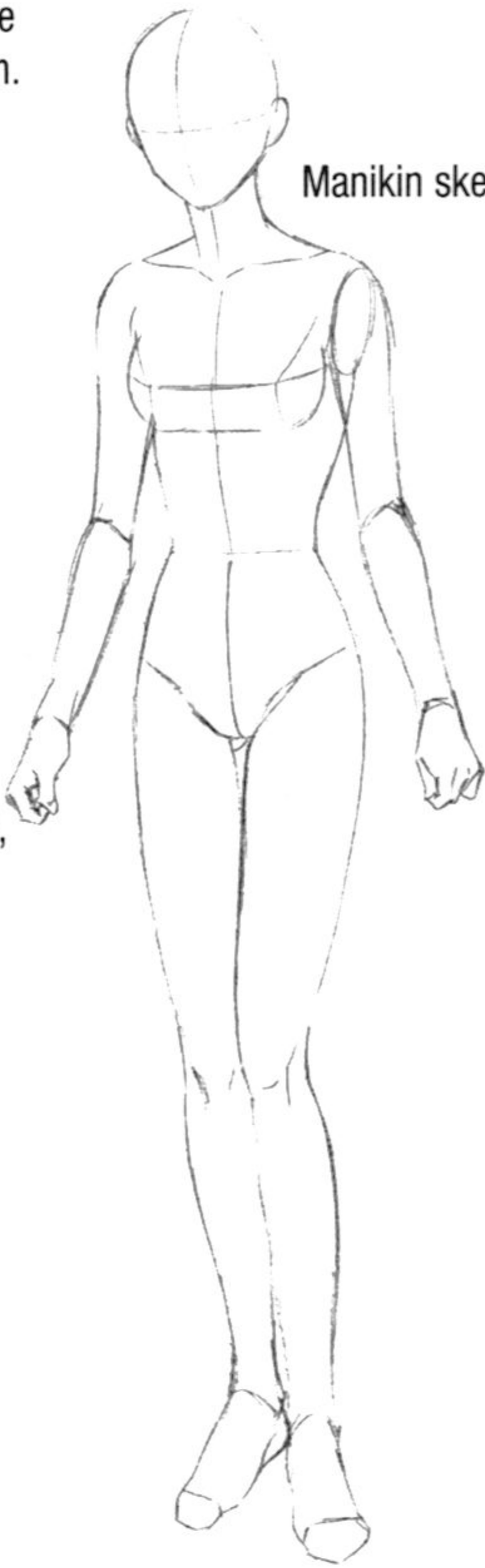
The above shows the groin and the hips. To ensure that the legs project a shapely impression, even when hidden underneath a skirt, maintain awareness of where the groin is positioned and sketch the legs from the hips.



Drawing a curved line at the juncture where the ankle meets the foot helps to give the legs a sense of volume.

This shows the toes simplified and rendered as a single block.

Manikin sketch



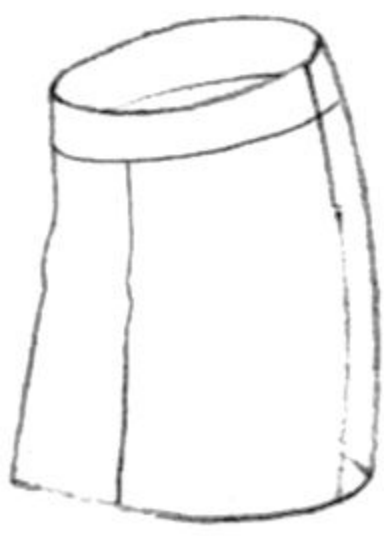
Plan the wardrobe beforehand



Cropped jacket with tailored sleeves



T-shirt



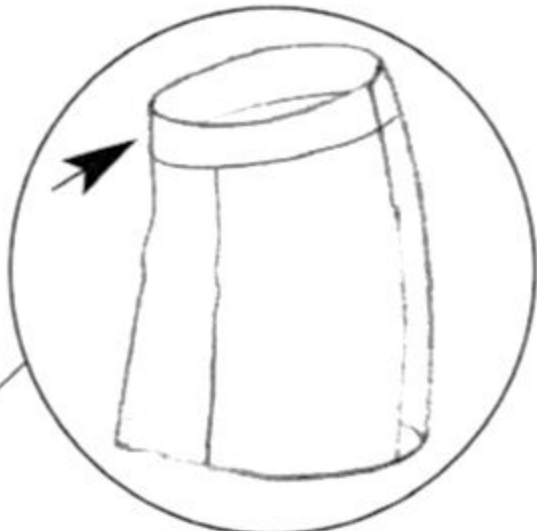
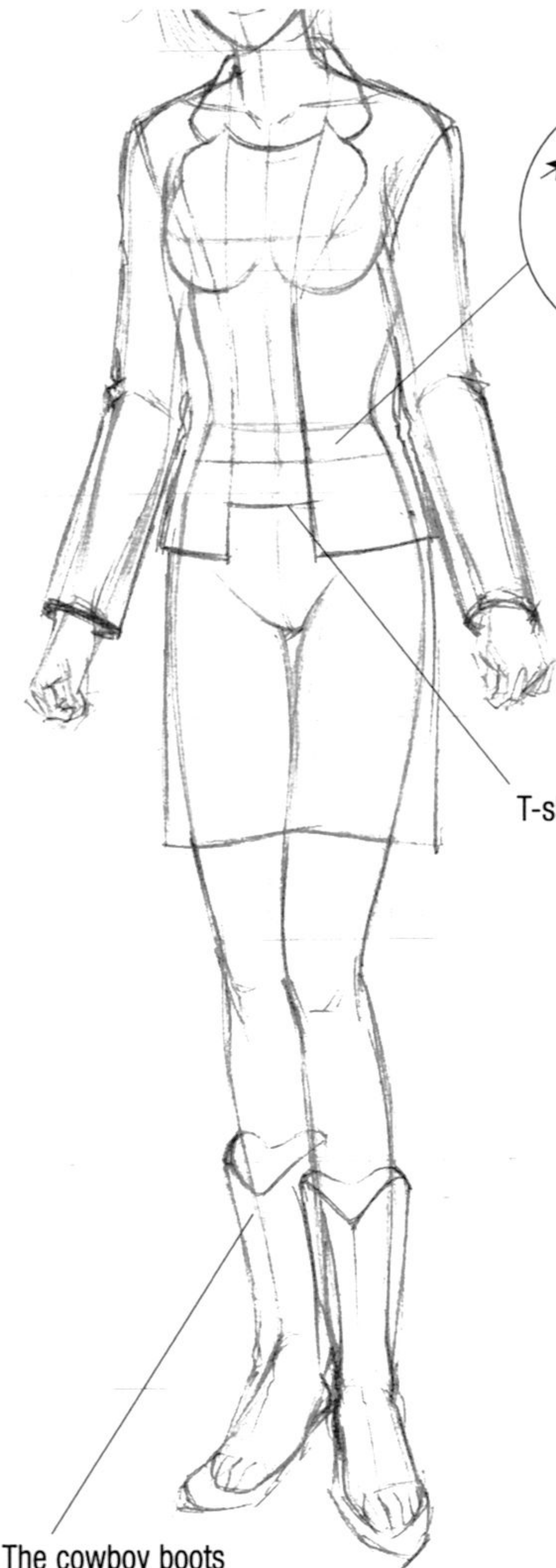
Low-rise miniskirt



Cowboy boots

Drawing the Clothes

Ensure that you have clearly captured the individual garments' distinguishing features.

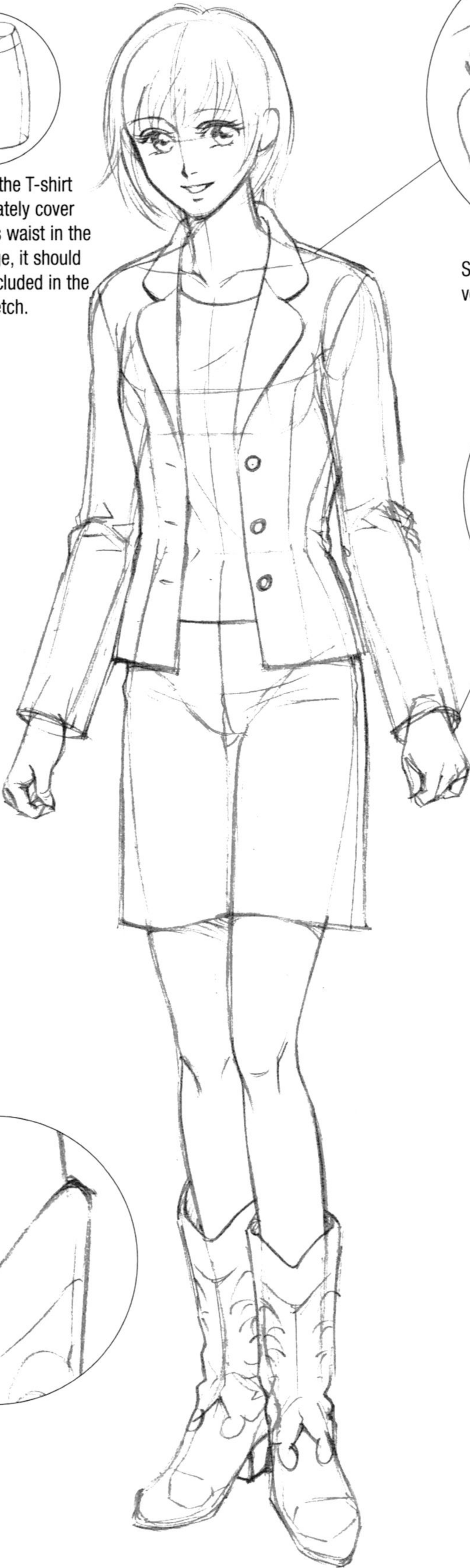
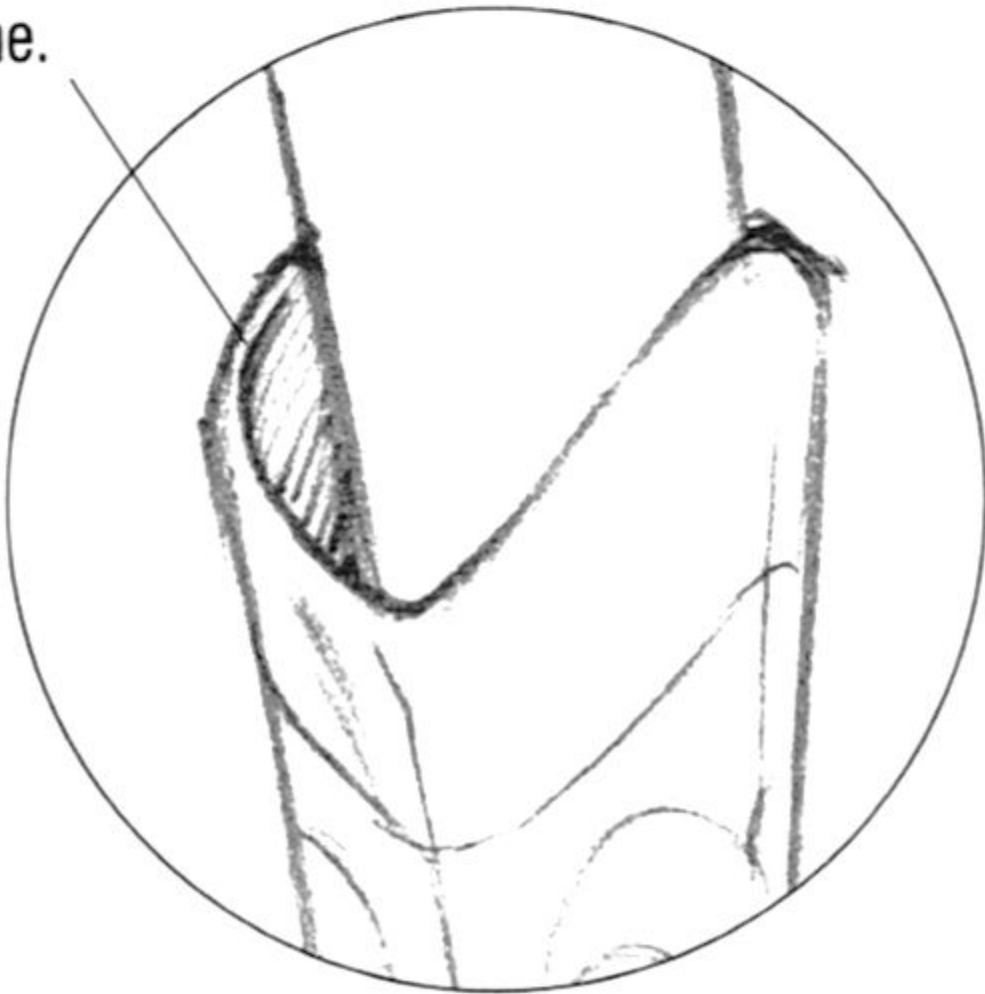


Although the T-shirt will ultimately cover the skirt's waist in the final image, it should still be included in the rough sketch.

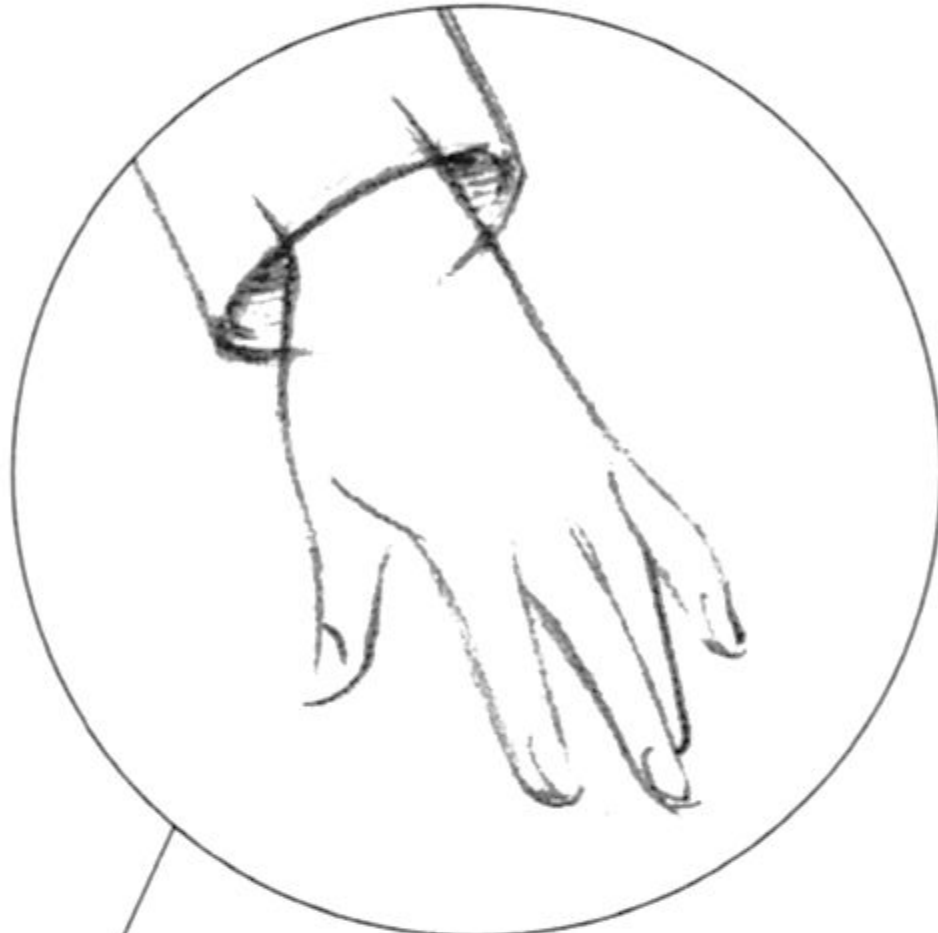
T-shirt hem

The cowboy boots have a roomy fit around the calves.

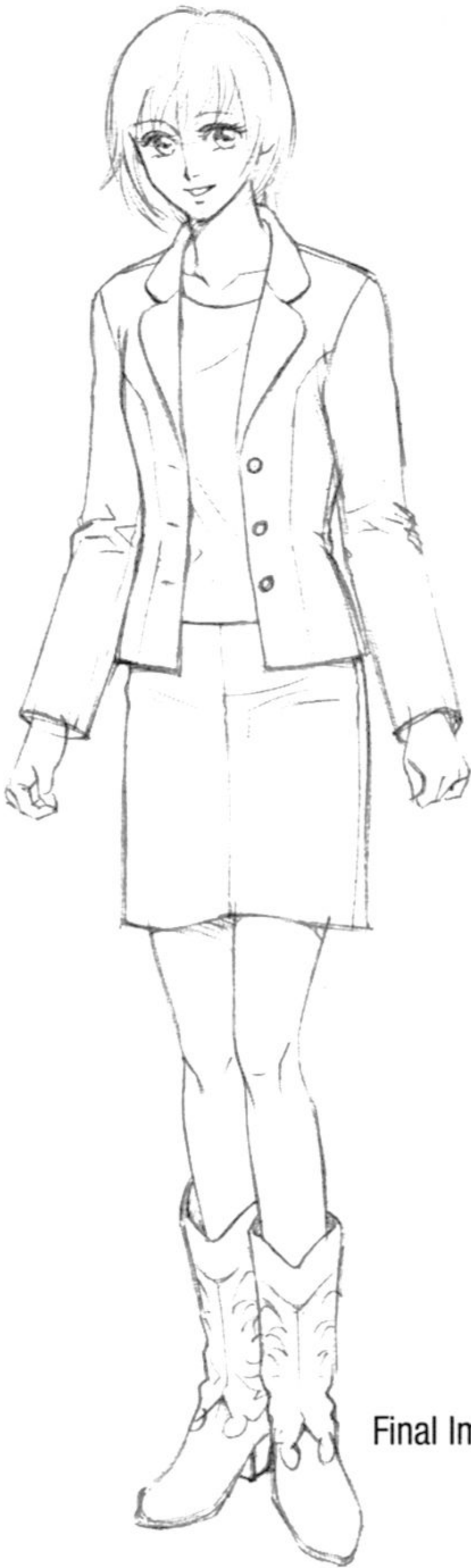
Use shading to give the boots' leather a sense of volume.



Shading gives the jacket the illusion of volume.



The sleeves form a cylinder.



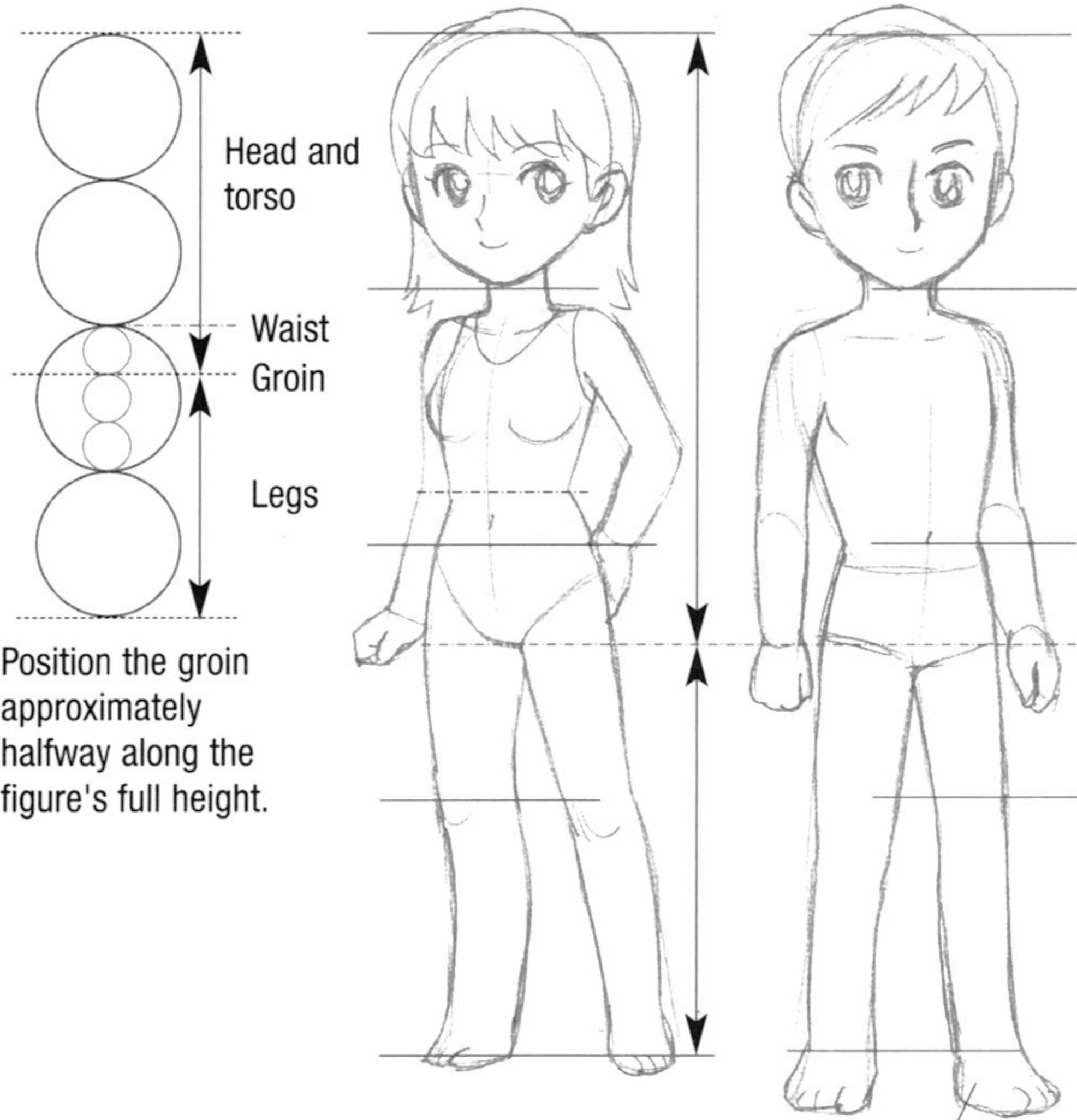
Final Image

Chibi Characters: 1:4 to 1:2 Head-to-Body Ratios

With cute, short legs, *chibi* characters are proportioned to look adorable. The legs should be stubby and comprise half or less of the body's height.

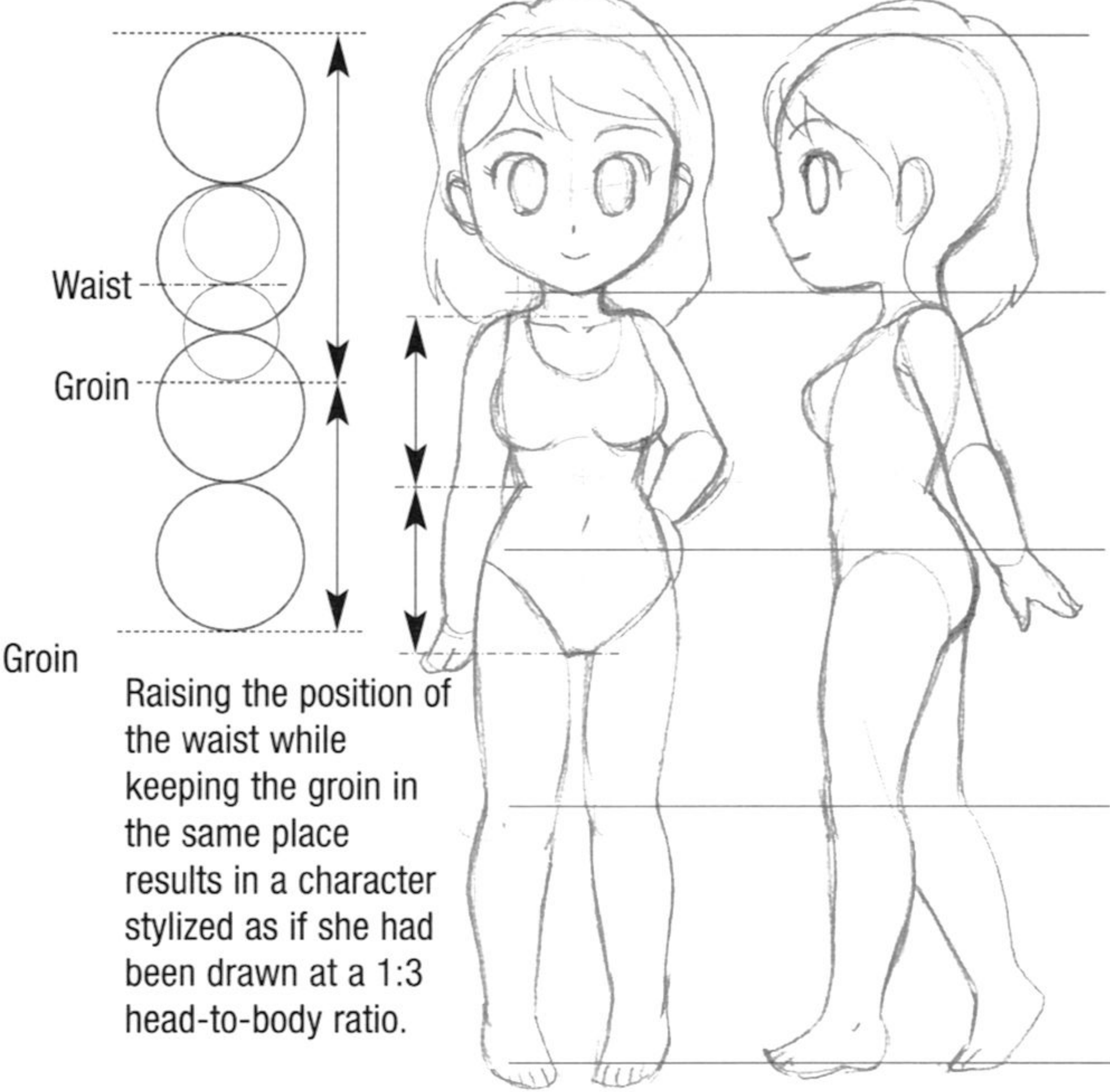
1:4 Head-to-Body Ratio

Standard Proportioning



Position the groin approximately halfway along the figure's full height.

"Cute" Proportioning

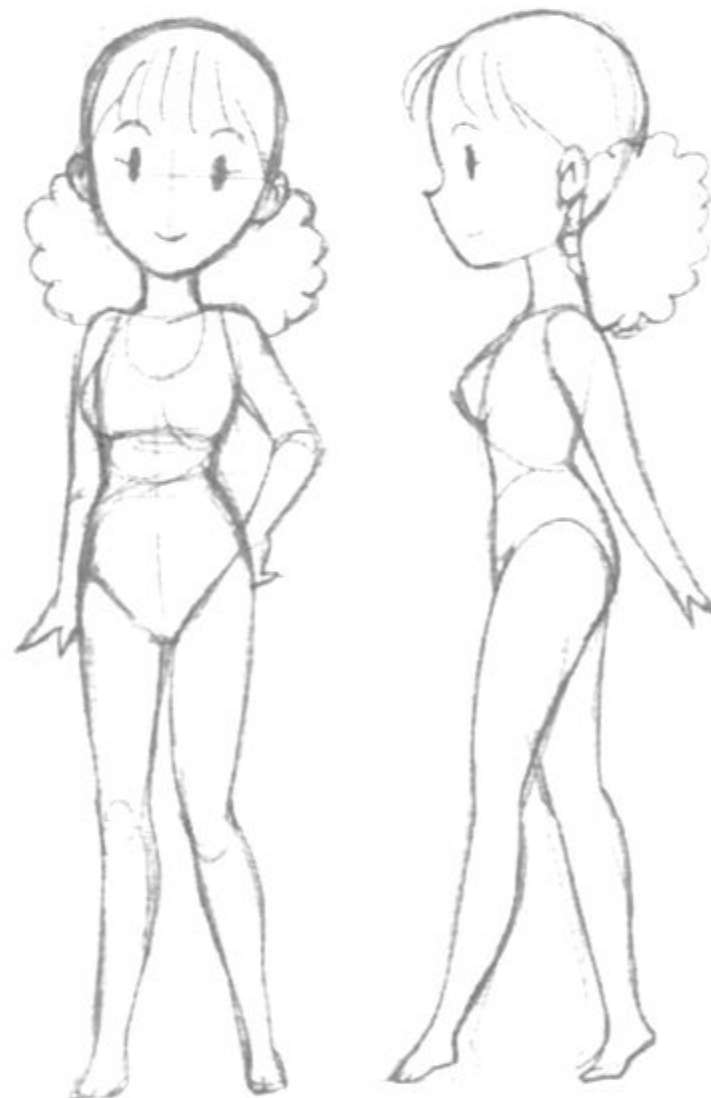


Raising the position of the waist while keeping the groin in the same place results in a character stylized as if she had been drawn at a 1:3 head-to-body ratio.



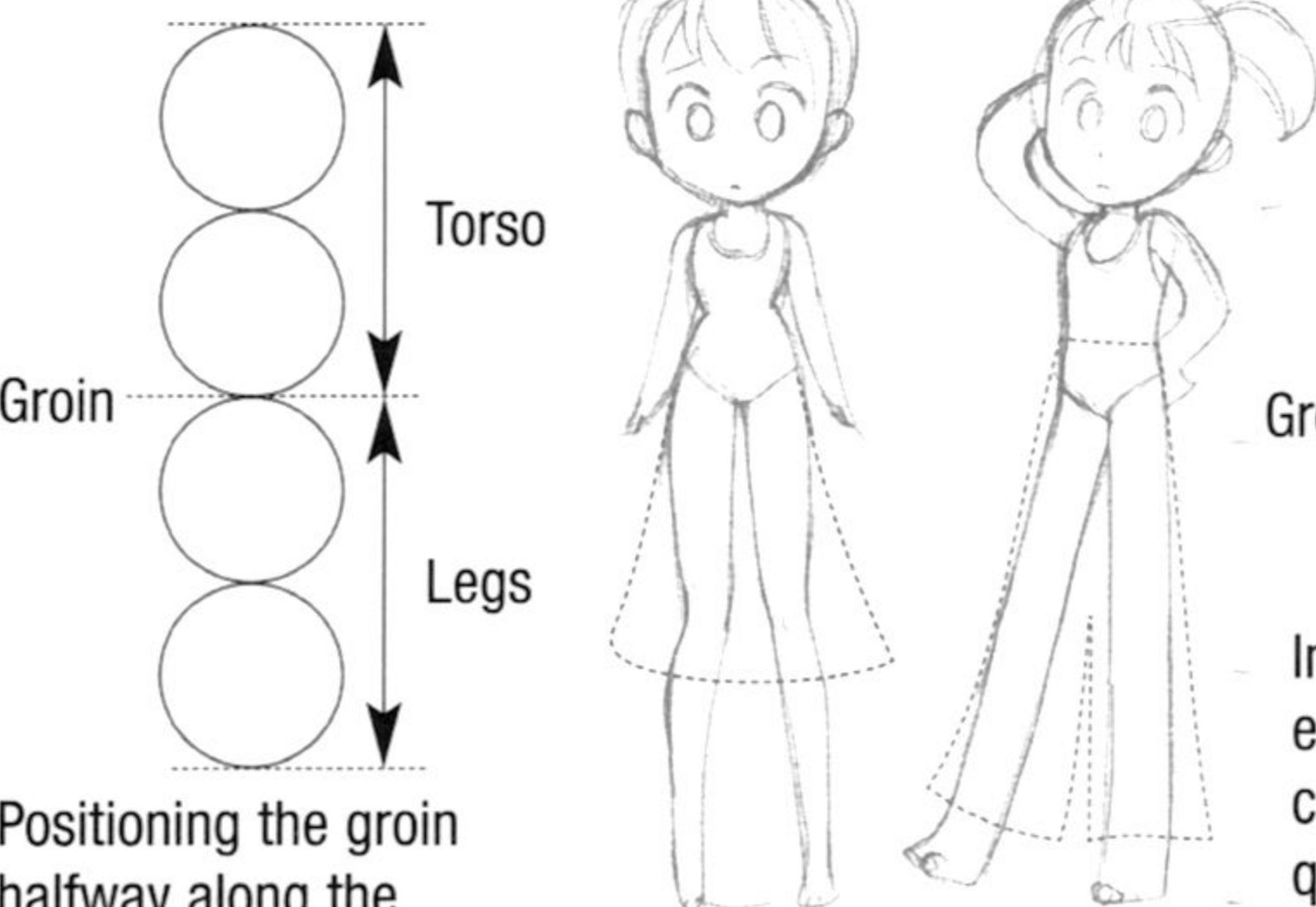
Drawing the character with sturdy legs gives him a distinctively masculine appearance. The longer legs mean that the boy is also taller than his girl counterpart.

These stylized versions still maintain the same standard proportioning. The body's contours have been simplified and the hands and feet, enlarged.



Here is another figure with "cute" proportioning. This time, the figure has been made slimmer all over.

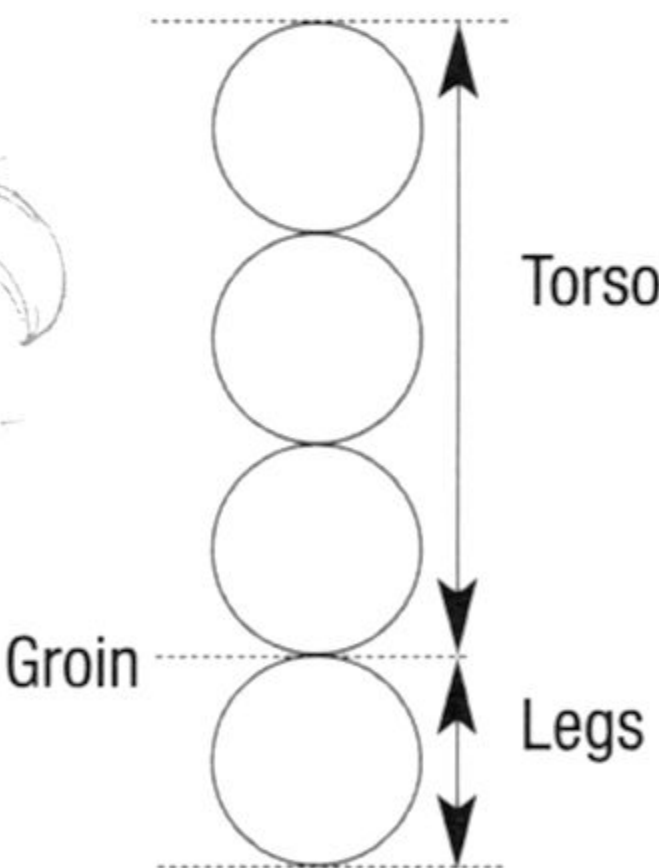
Long-legged Proportioning



Positioning the groin halfway along the character's full height destroys the overall balance.

Dress the character in a skirt or pants.

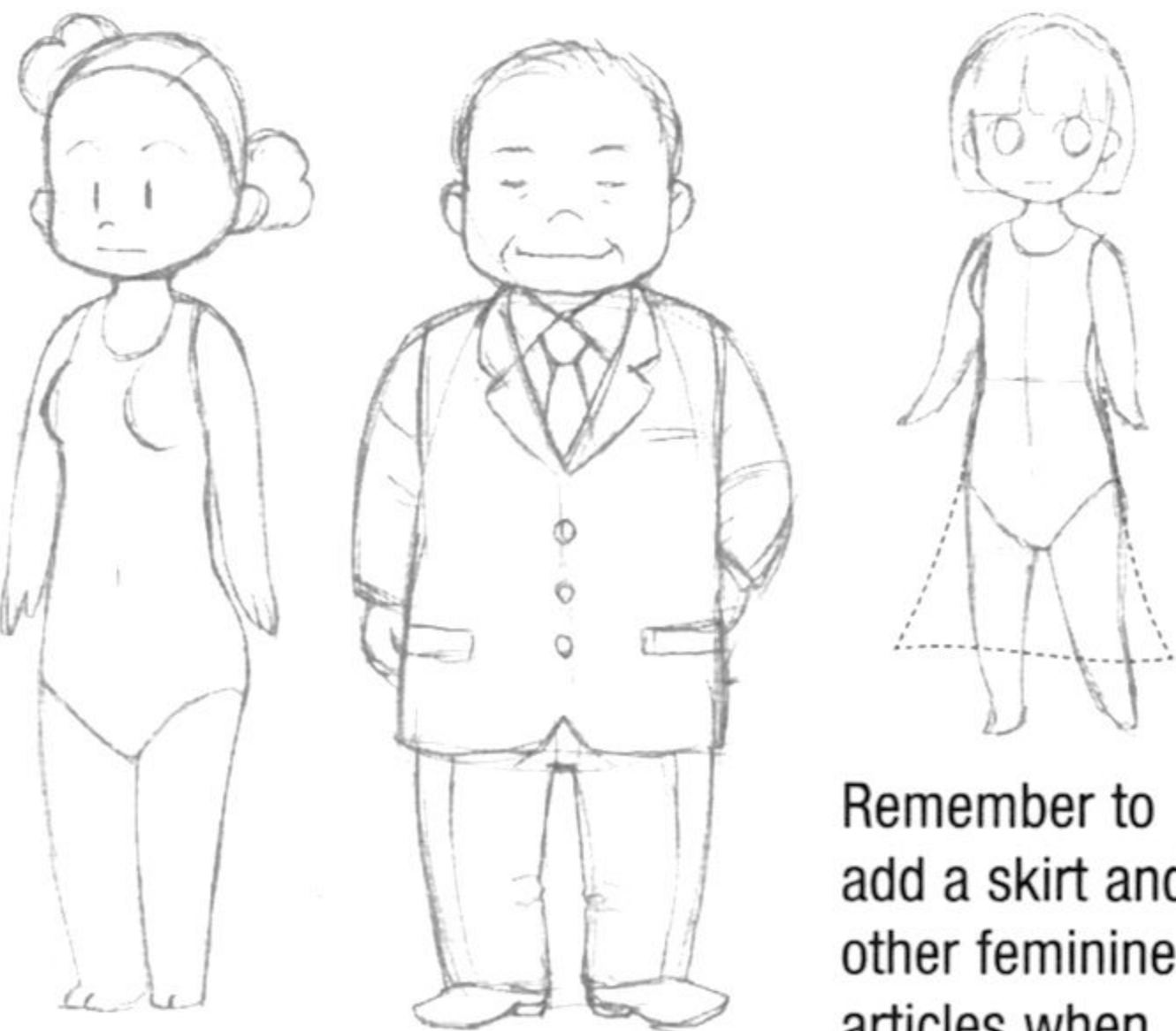
Long Torso Proportioning



In the above, the extremely short legs comprise a meager quarter of the figure's full height.



This is the proportioning used with *dogu** figures.



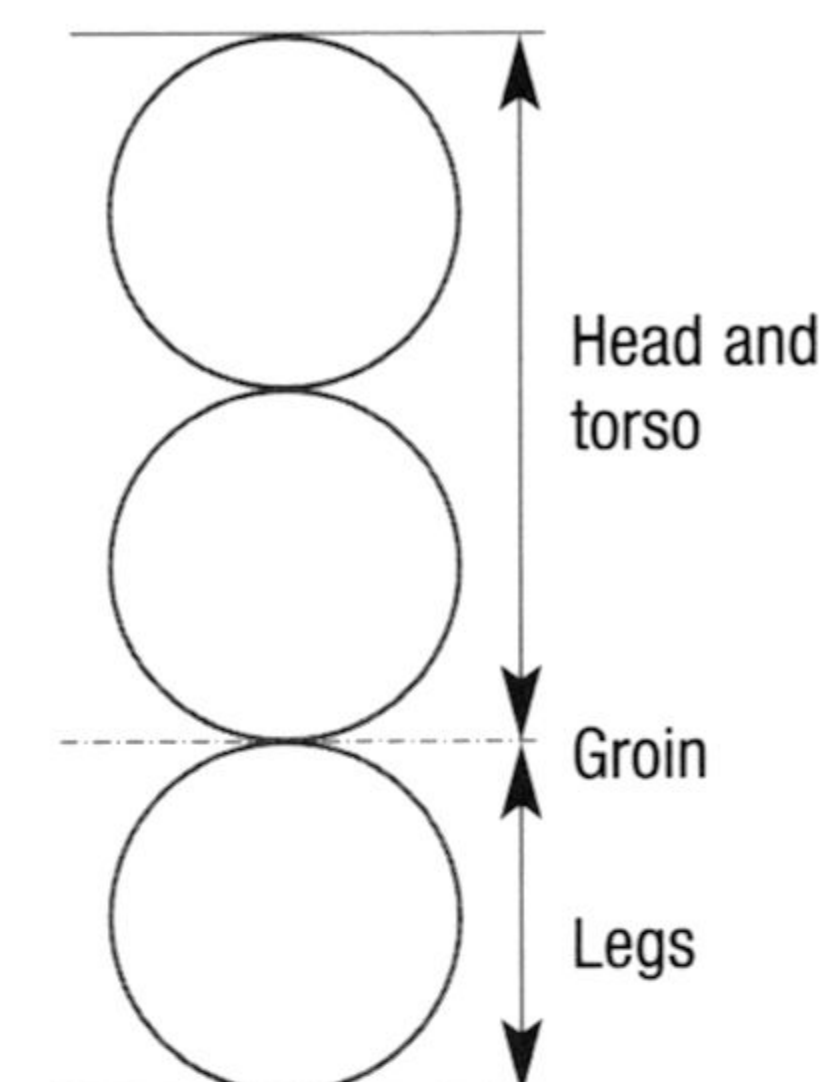
These proportions work well with *manga*-style middle-aged male and female characters.

Remember to add a skirt and other feminine articles when drawing a regular female character.

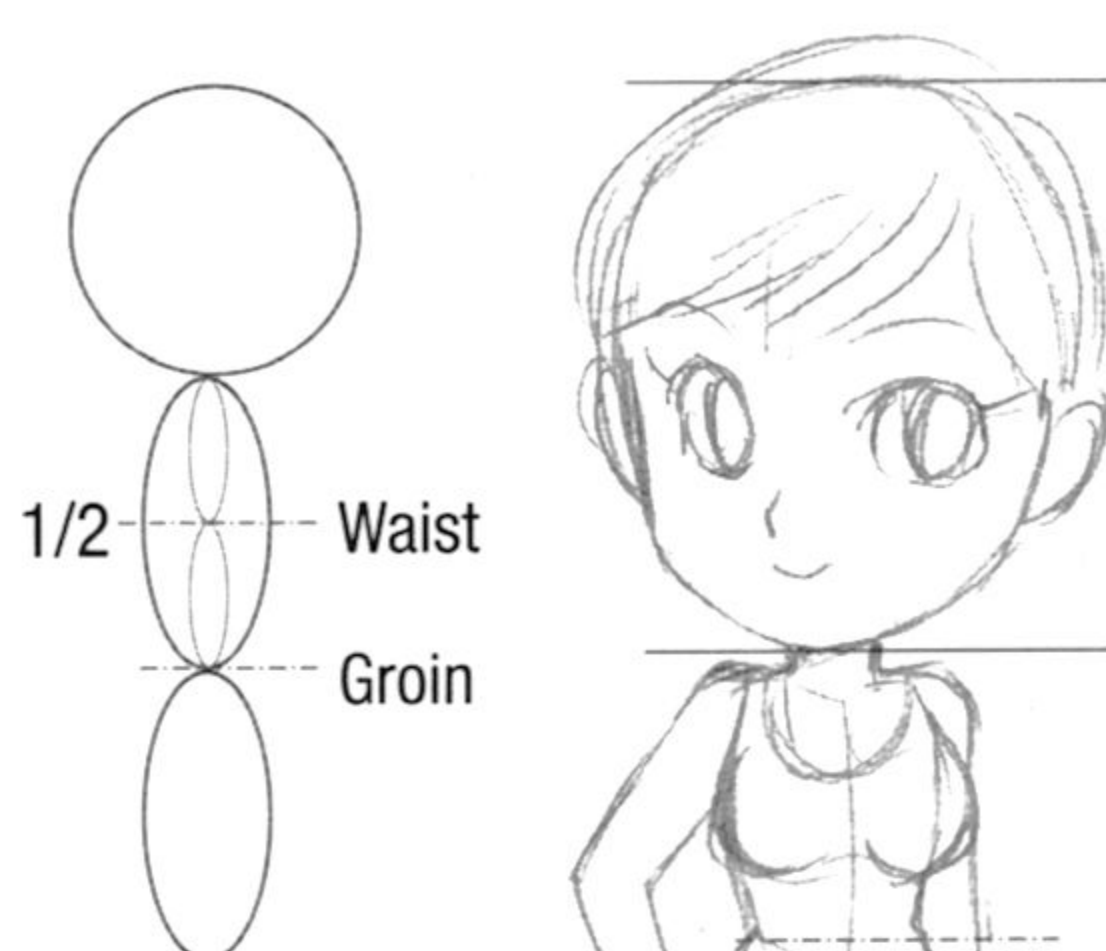
**Dogu* are earthenware figures from the Jomon Period (approximately 10,000 BC to 300 BC). Theories regarding their functions range from dolls to talisman, ritual votives, or funerary offerings.

1:3 Head-to-Body Ratio

Standard Proportioning



Use the same length for the waist, the torso, and the legs.



The above and the figure to the right show how a character looks when the waist is centered on the torso.

Giving the character a slender torso and fleshing out the arms and legs in a realistic manner produces a trim, realistic-looking, mature female character.

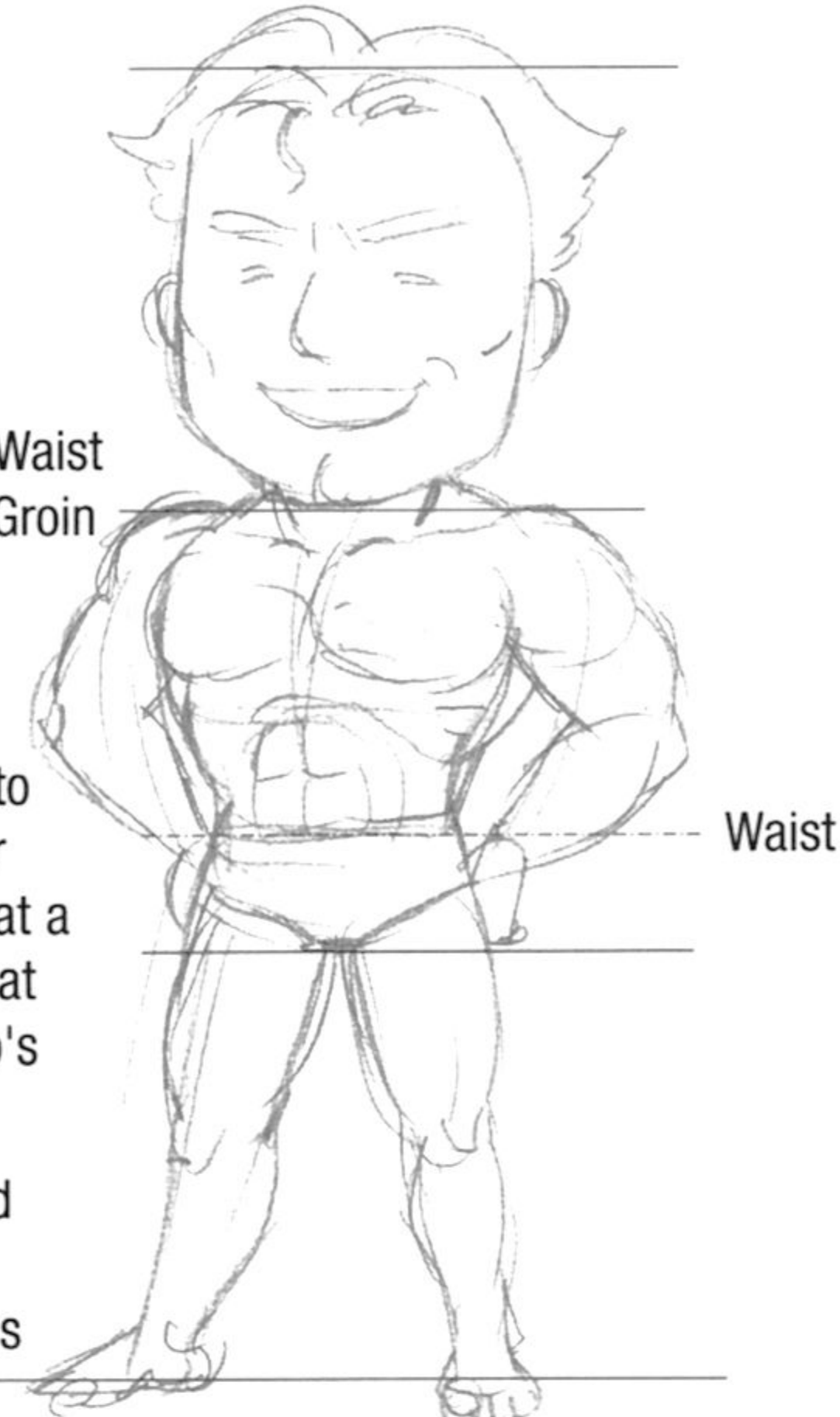


Raising the position of the waist while keeping the groin in the same place results in a character stylized as if she had been drawn at a 1:3 head-to-body ratio.

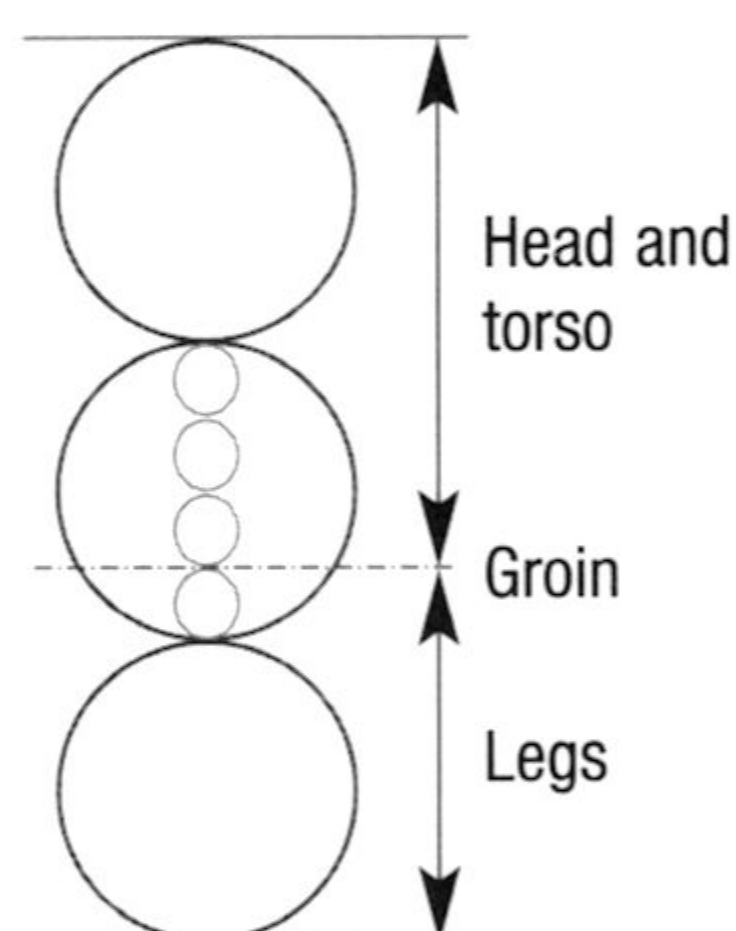


The above and the figure to the right show a character with the waist positioned at a distance from the groin that is one-quarter of the torso's full length.

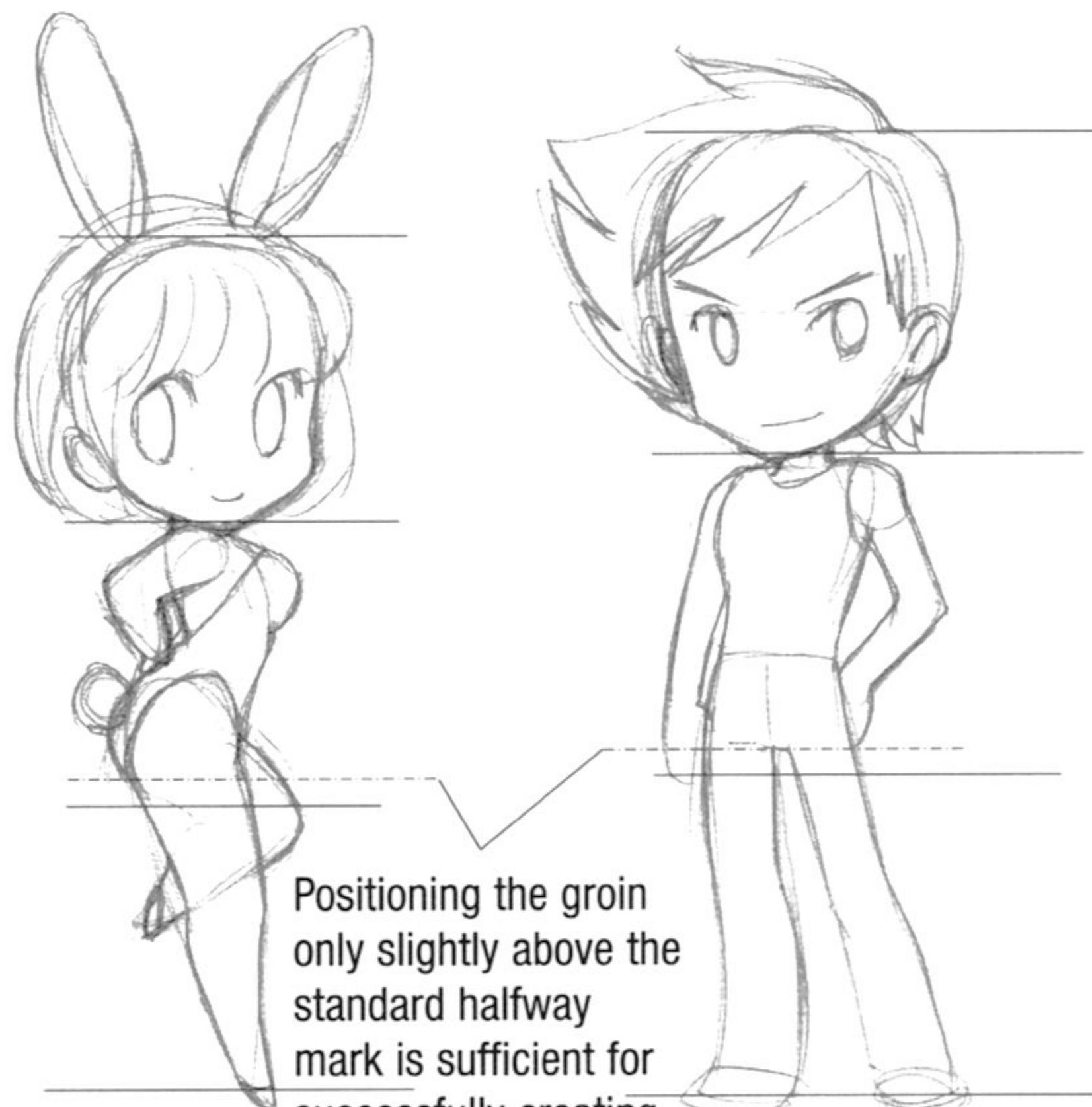
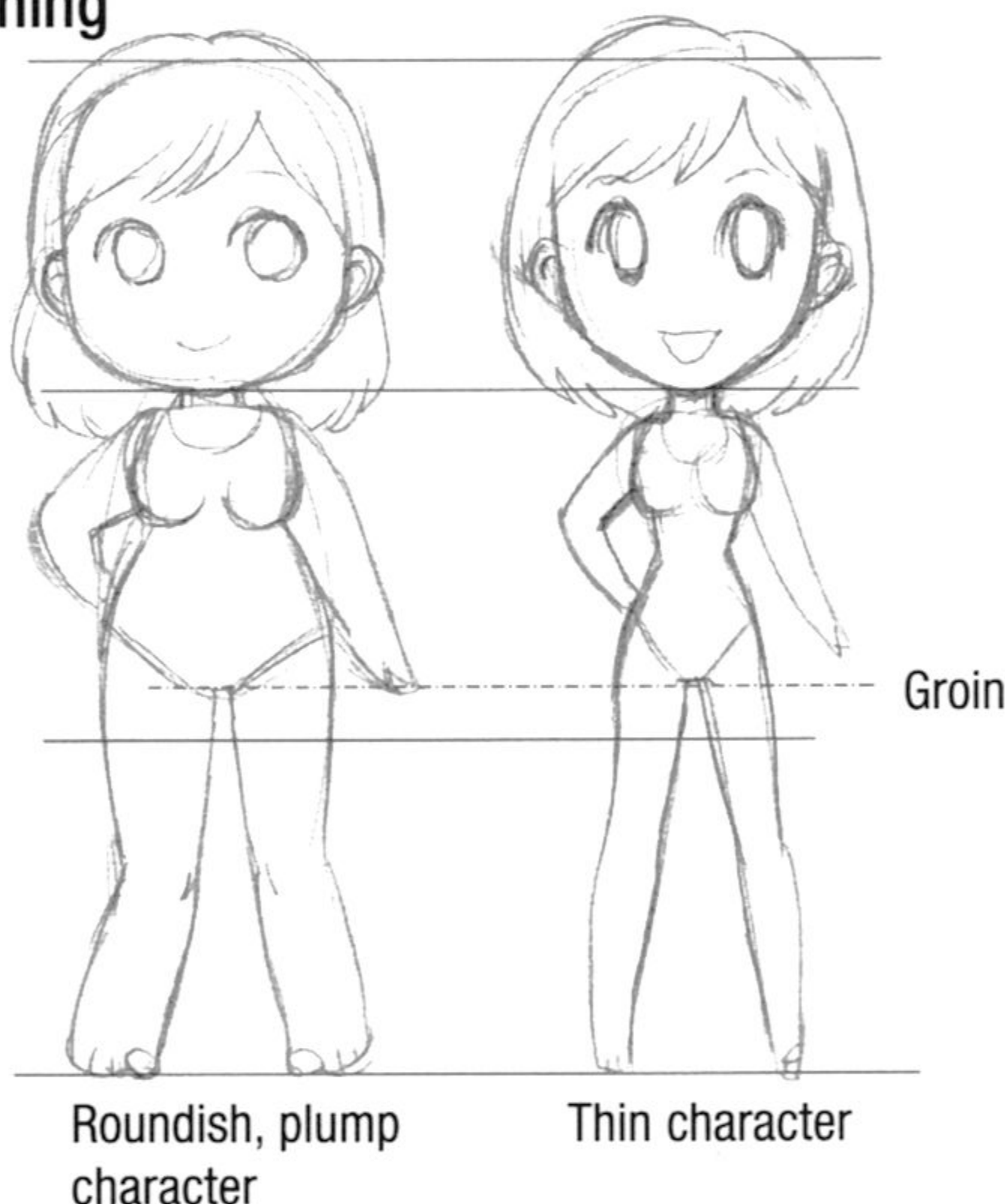
Making the torso wide and covering the body in developed muscles creates the appearance of a physically powerful character.



Long-legged Proportioning

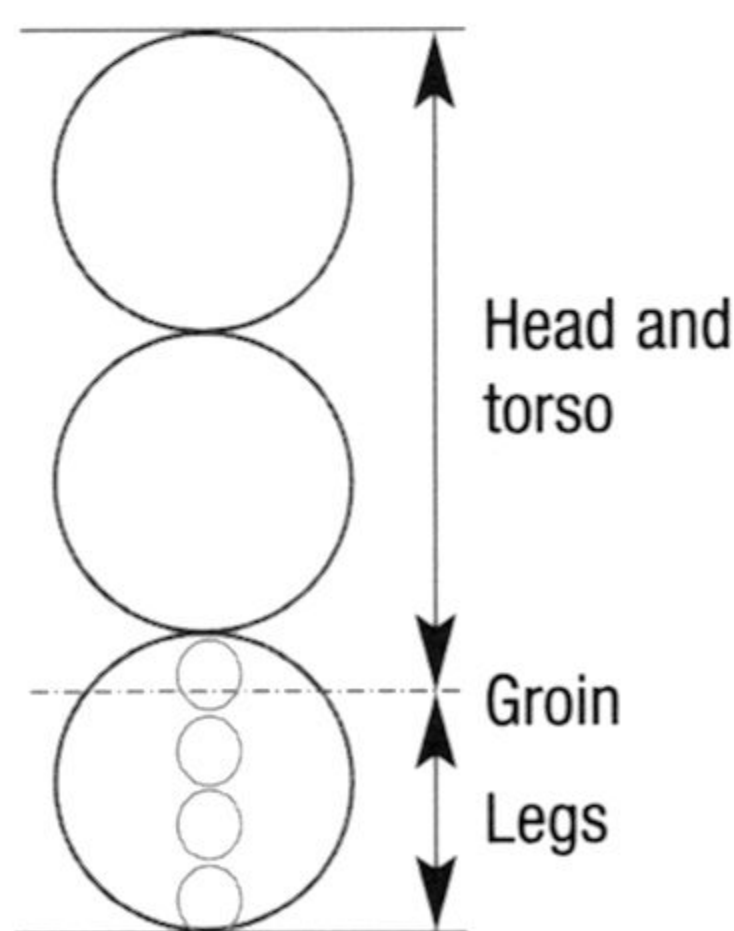


Characters with overly long legs look odd. Avoid making the torso less than one-quarter the character's full height.

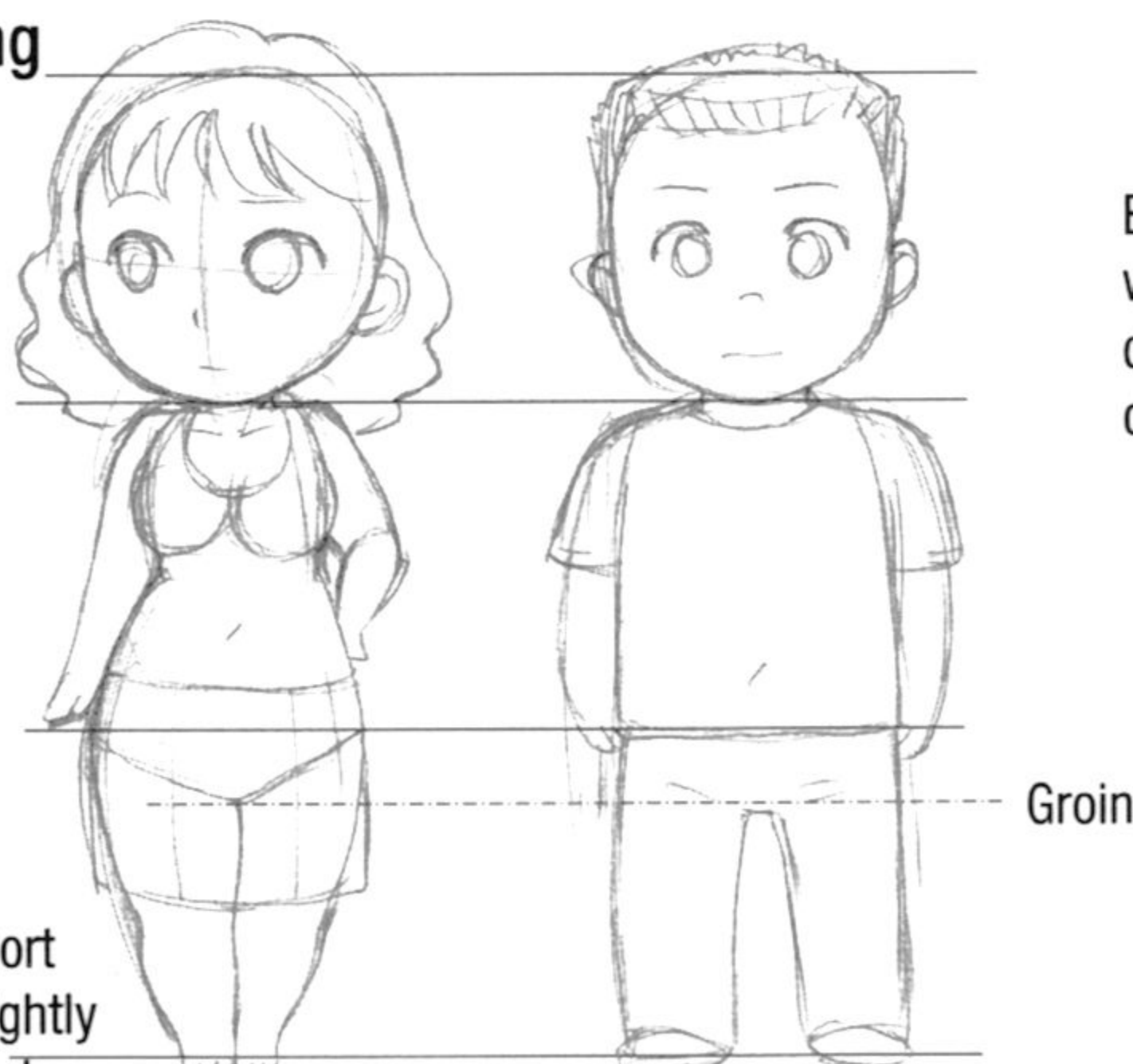


Positioning the groin only slightly above the standard halfway mark is sufficient for successfully creating the look of a long-legged character.

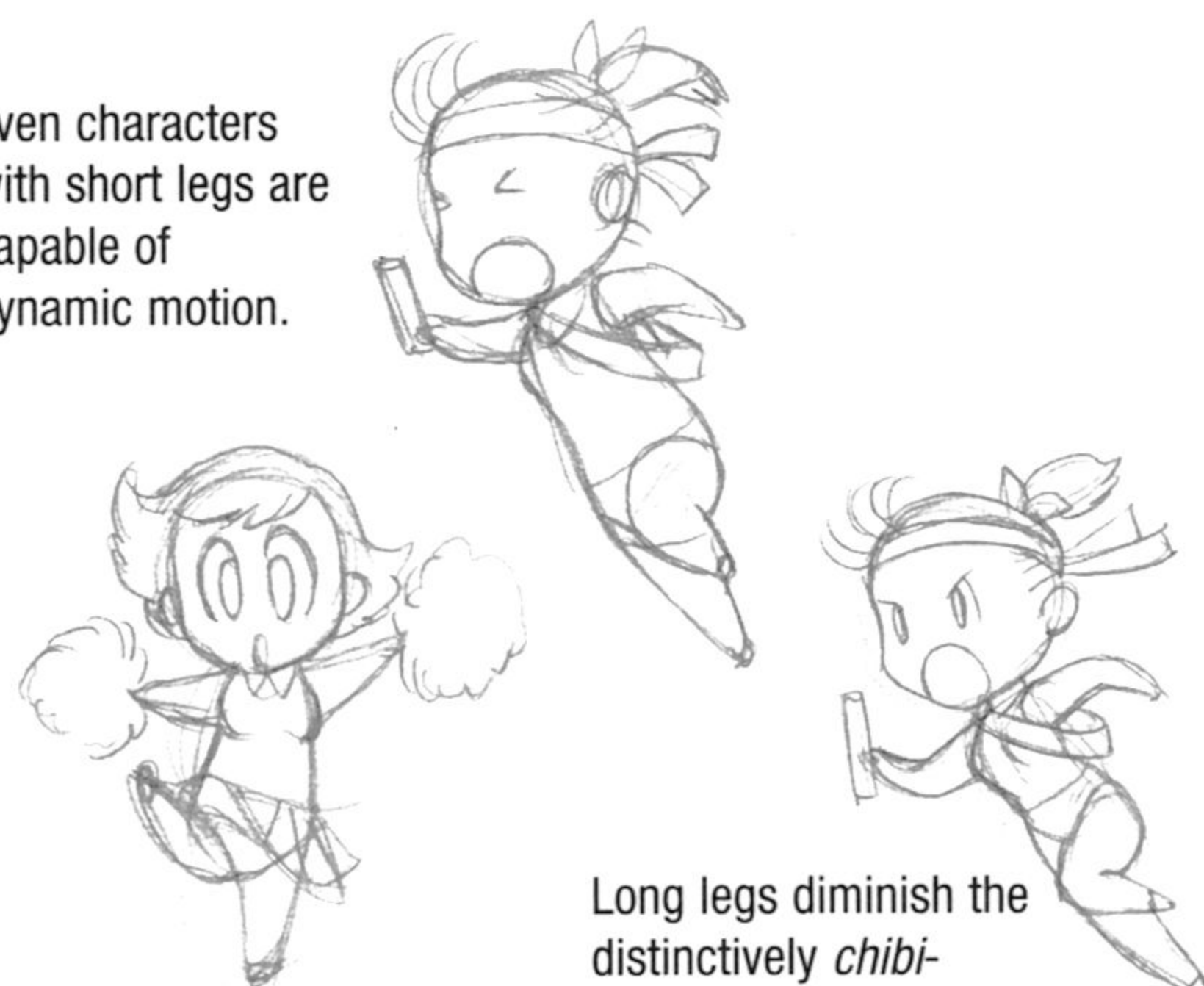
Long Torso Proportioning



Since this proportioning is intended for characters with short legs, try shifting the groin to slightly below the standard halfway mark so that the waist and groin comprise half of the torso's full length.



Even characters with short legs are capable of dynamic motion.

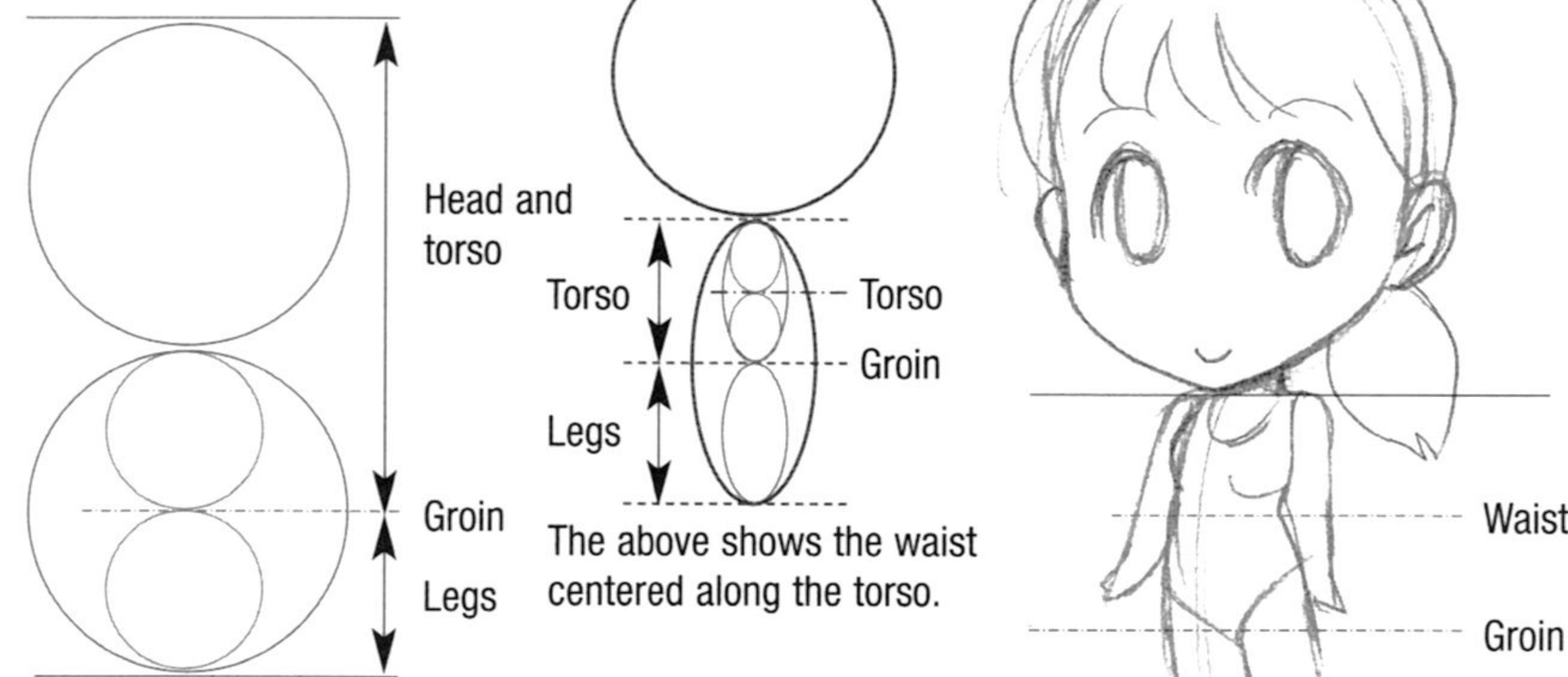


Long legs diminish the distinctively *chibi*-esque look.

1:2 Head-to-Body Ratio

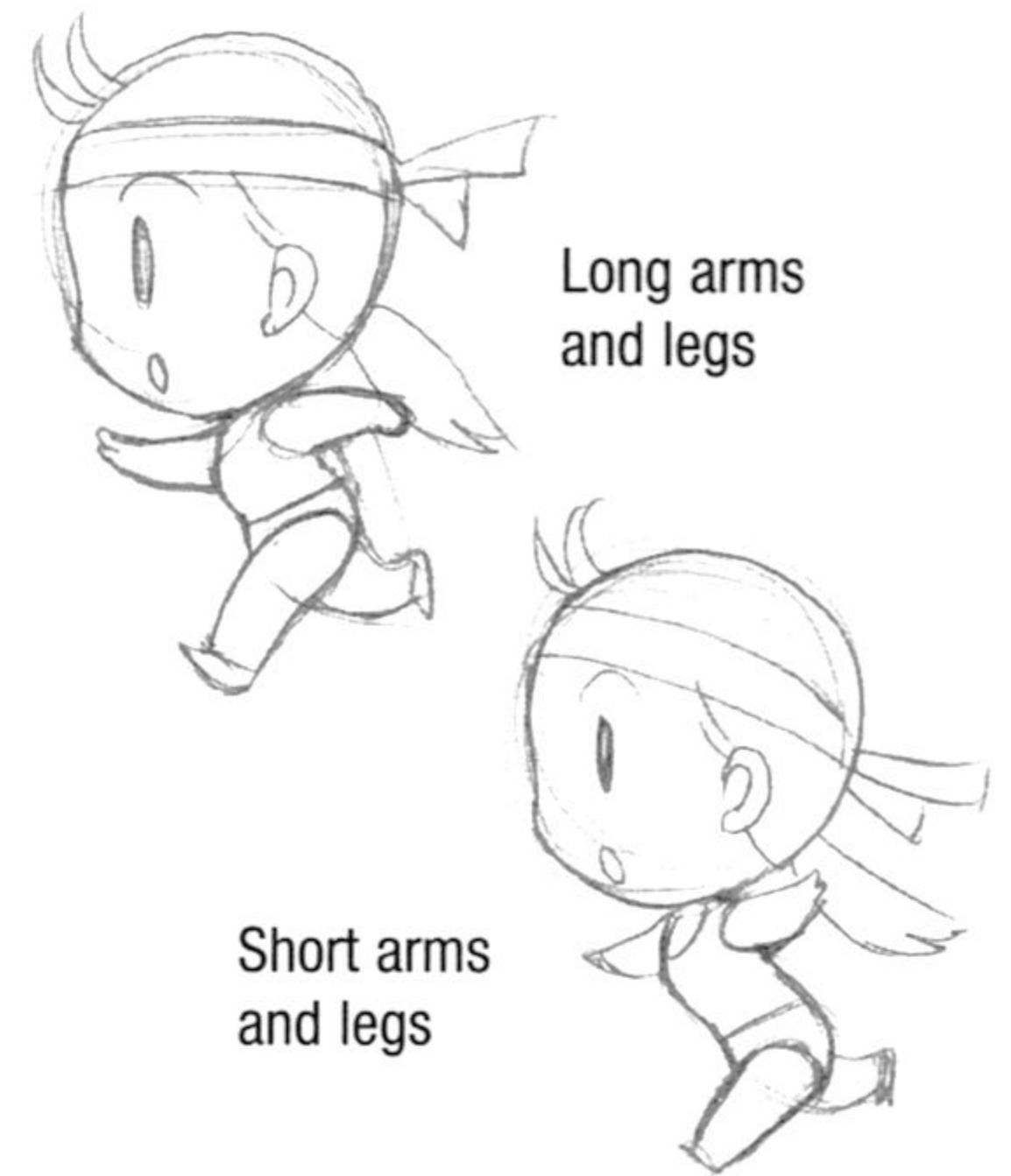
The same basic rules of adjusting the waist and groin's positions to modify the overall proportioning likewise apply to 1:2 head-to-body ratio characters. The length of the torso and legs combined equals that of one head. As a result, shifting the groin's position even slightly dramatically changes the overall body build.

Standard Proportioning

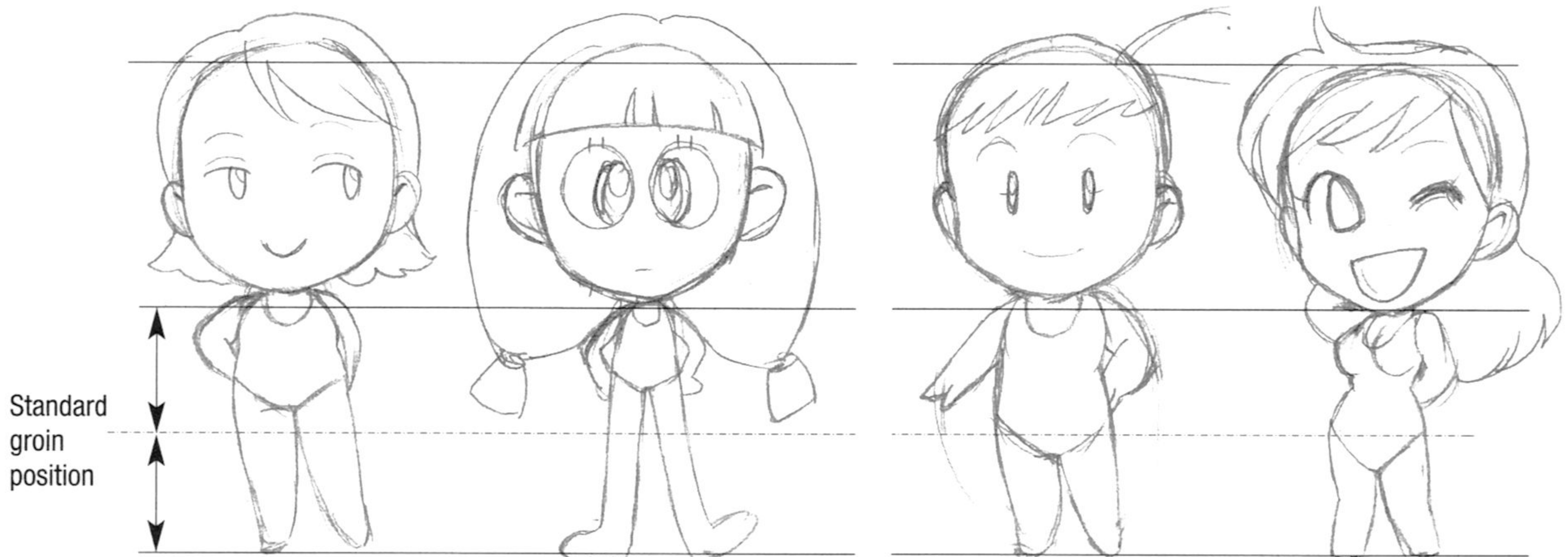


Make the torso and the legs approximately the same length.

This character was given a slender torso and pole-shaped arms and legs that taper at the extremities.



The lengths of the arms and legs changes according to the torso's length. However, the characters are still capable of dynamic movement, regardless of whether their limbs are long or short.



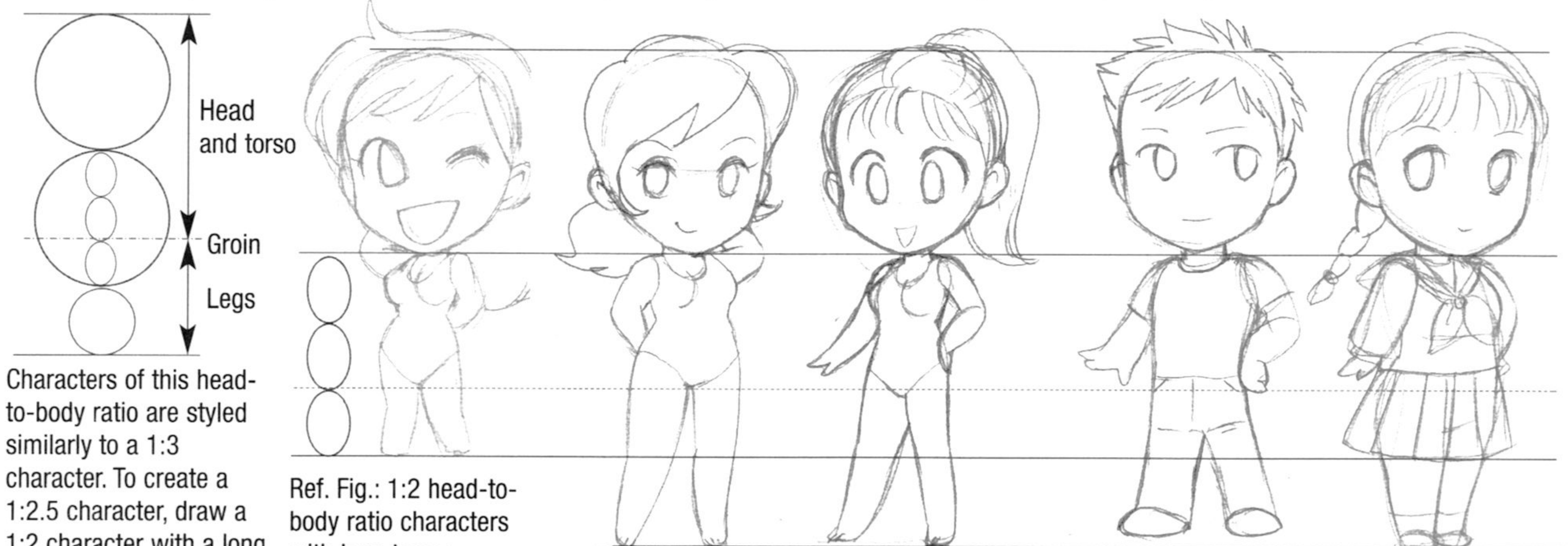
To create long-legged characters, raise the position of the groin. It is virtually impossible to include any hint of a waist on characters with this build.

To create characters with long torsos, lower the position of the groin. The larger torso requires representation of a waist.

1:2.5 Head-to-Body Ratio

Standard Proportioning

Long Torso Proportioning

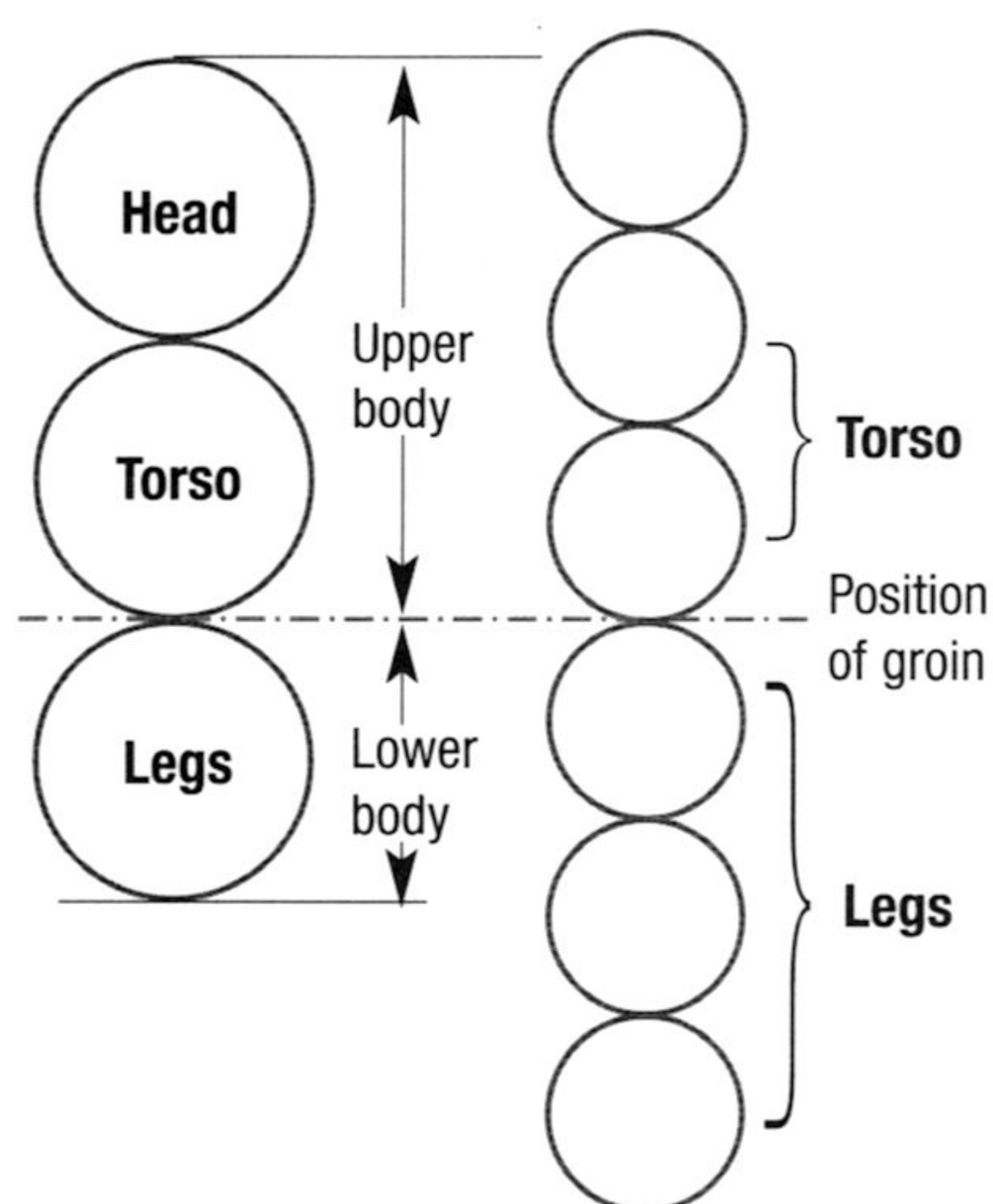


Characters of this head-to-body ratio are styled similarly to a 1:3 character. To create a 1:2.5 character, draw a 1:2 character with a long torso and then lengthen the legs.

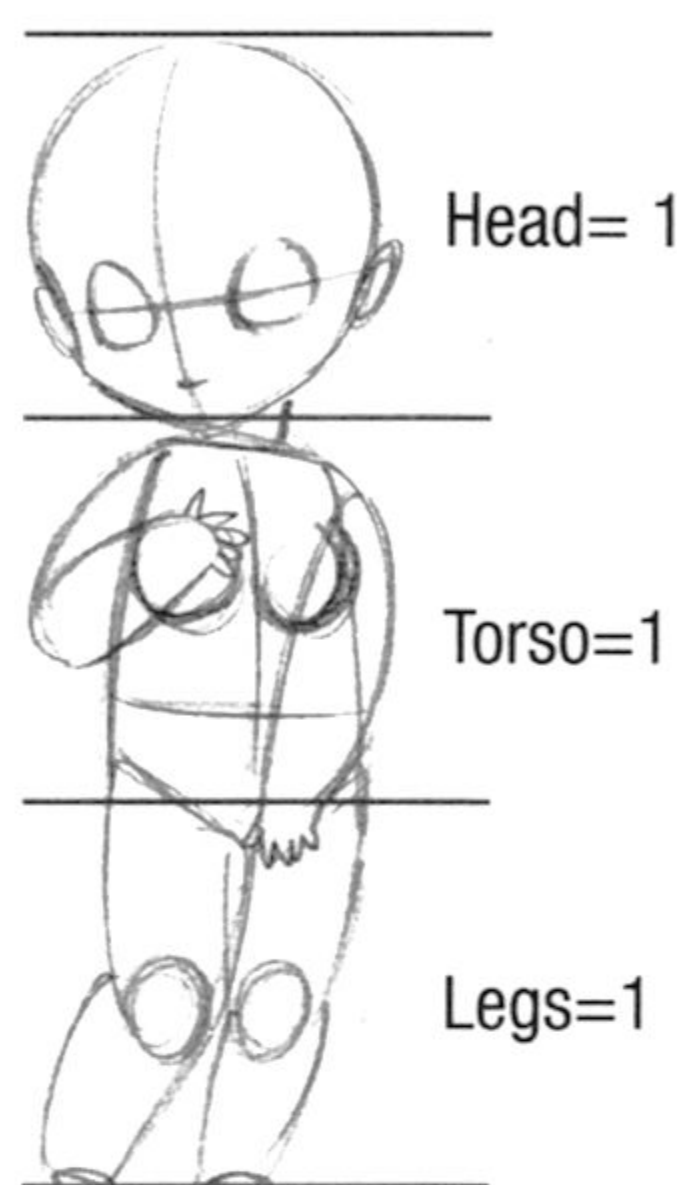
Key Points in Modifying the Head-to-Body Ratio

Drawing the Head, Torso, and Legs as Three Separate Units

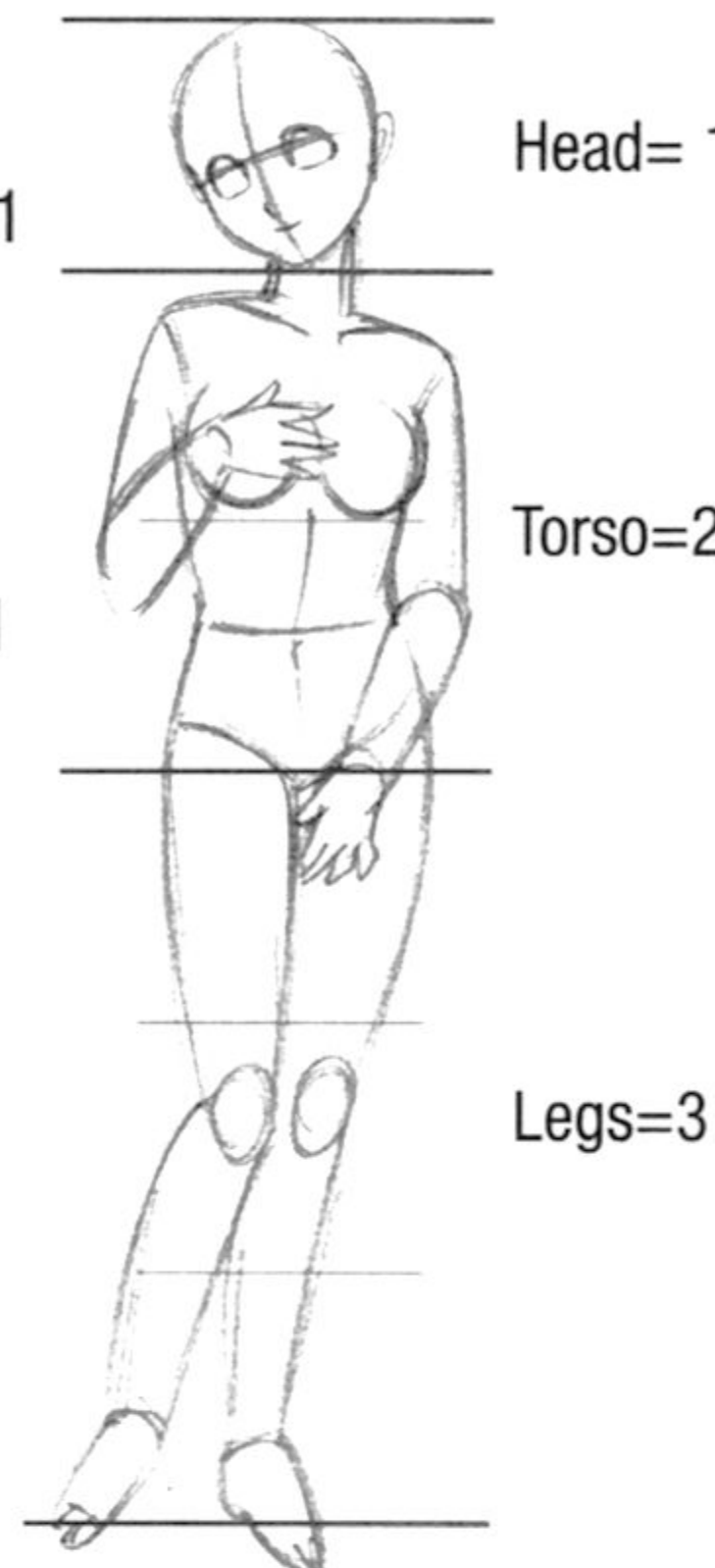
The number of units remains the same, regardless of the head-to-body ratio adopted. The difference in proportions occupied by the three units: the head, the torso, and the legs, reflects the differences in the head-to-body ratio.



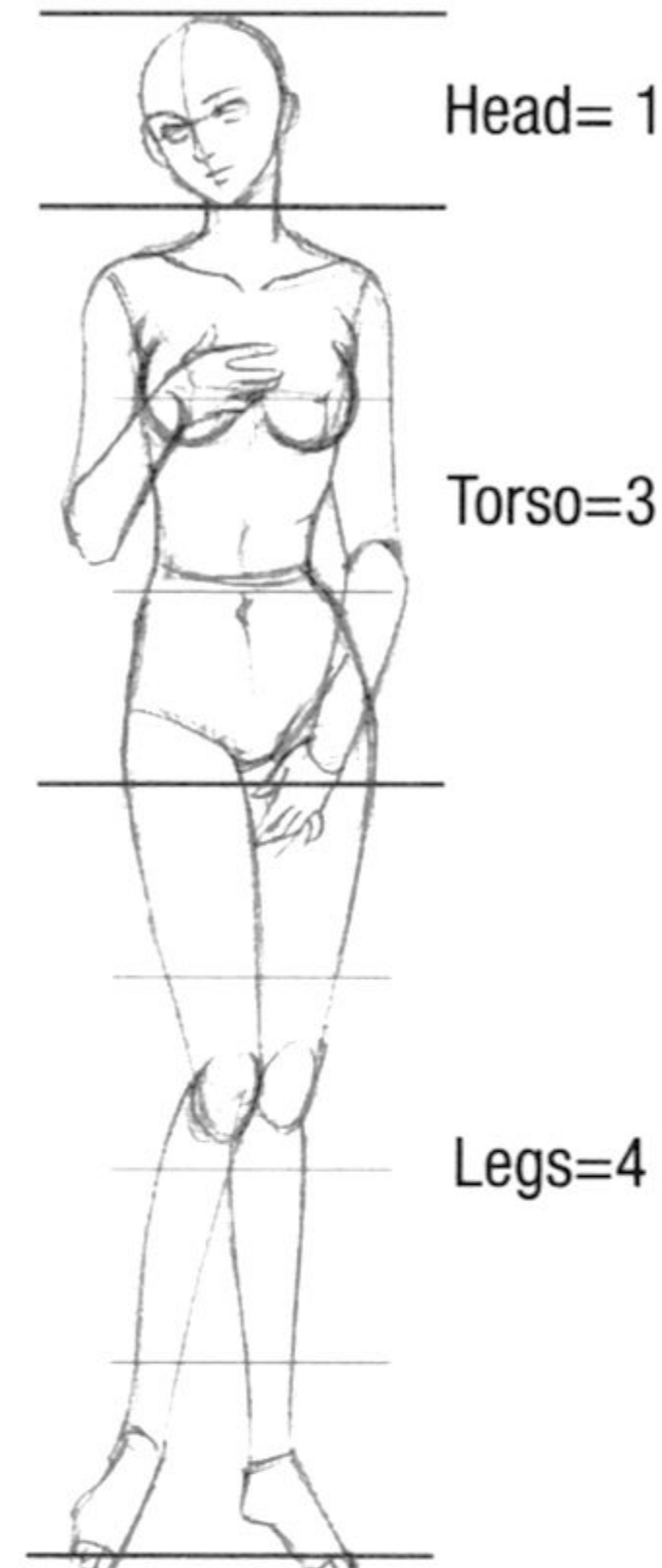
1:3 head-to-body ratio



1:6 head-to-body ratio

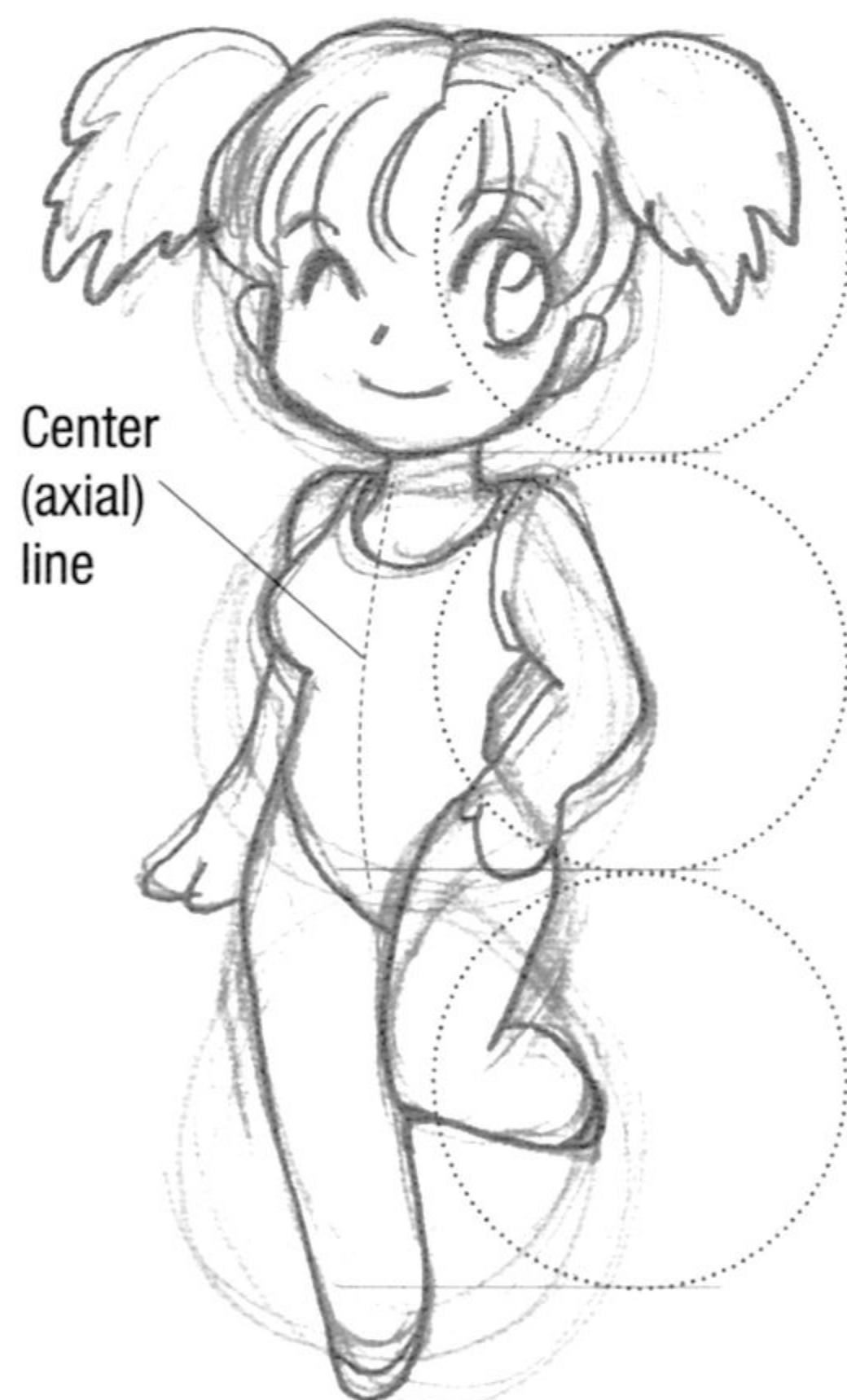


1:8 head-to-body ratio



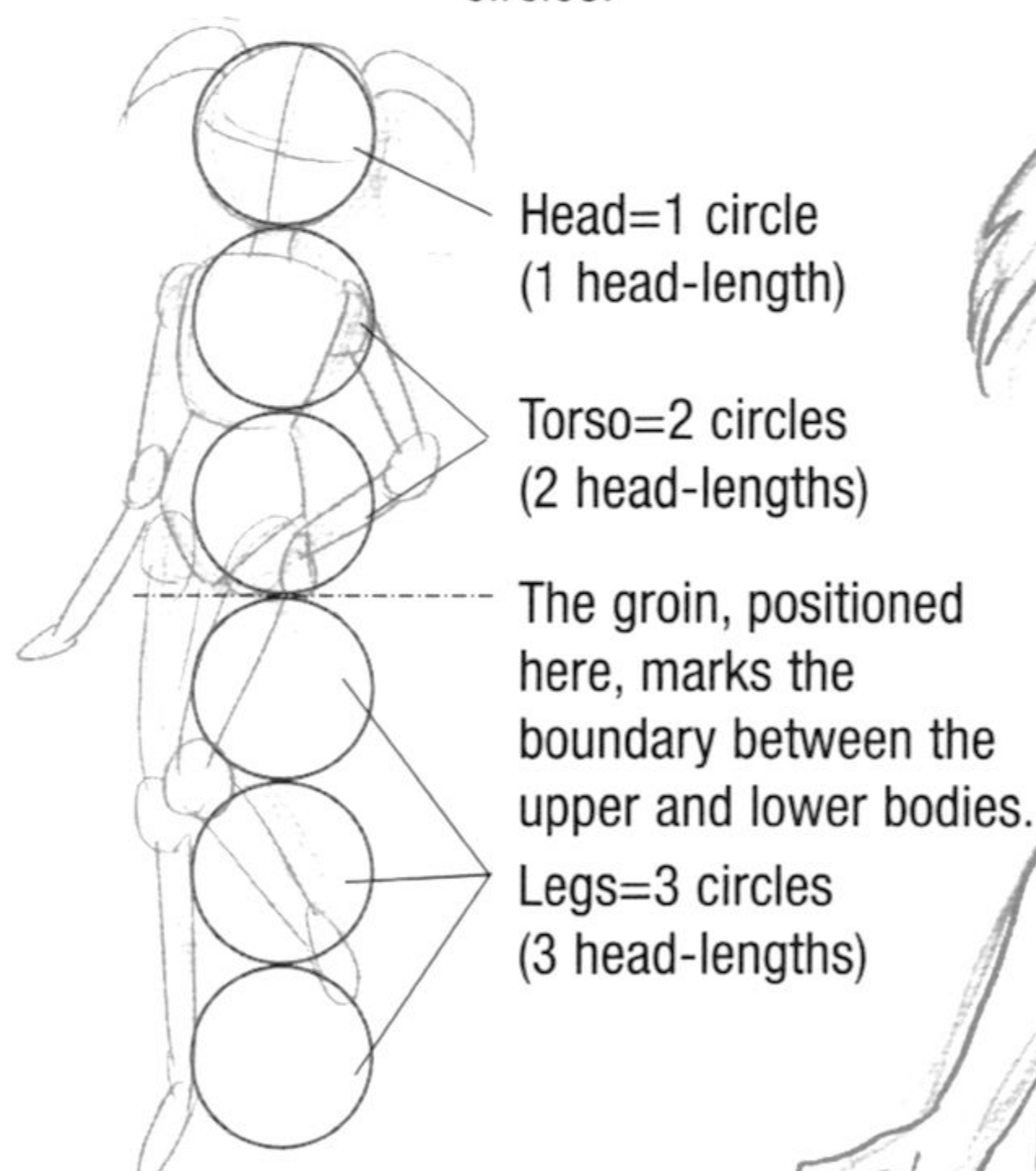
The Groin as the Boundary between the Upper and Lower Bodies

1:3 head-to-body ratio

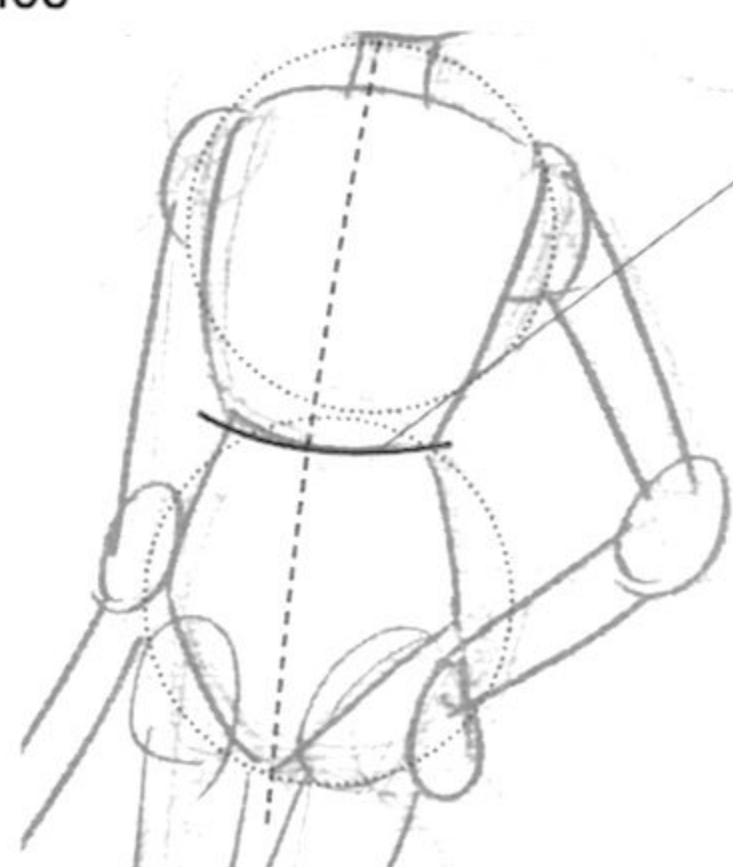


First determine the head-to-body ratio you intend to use and then use circles one-head in length to lay out the proportions.

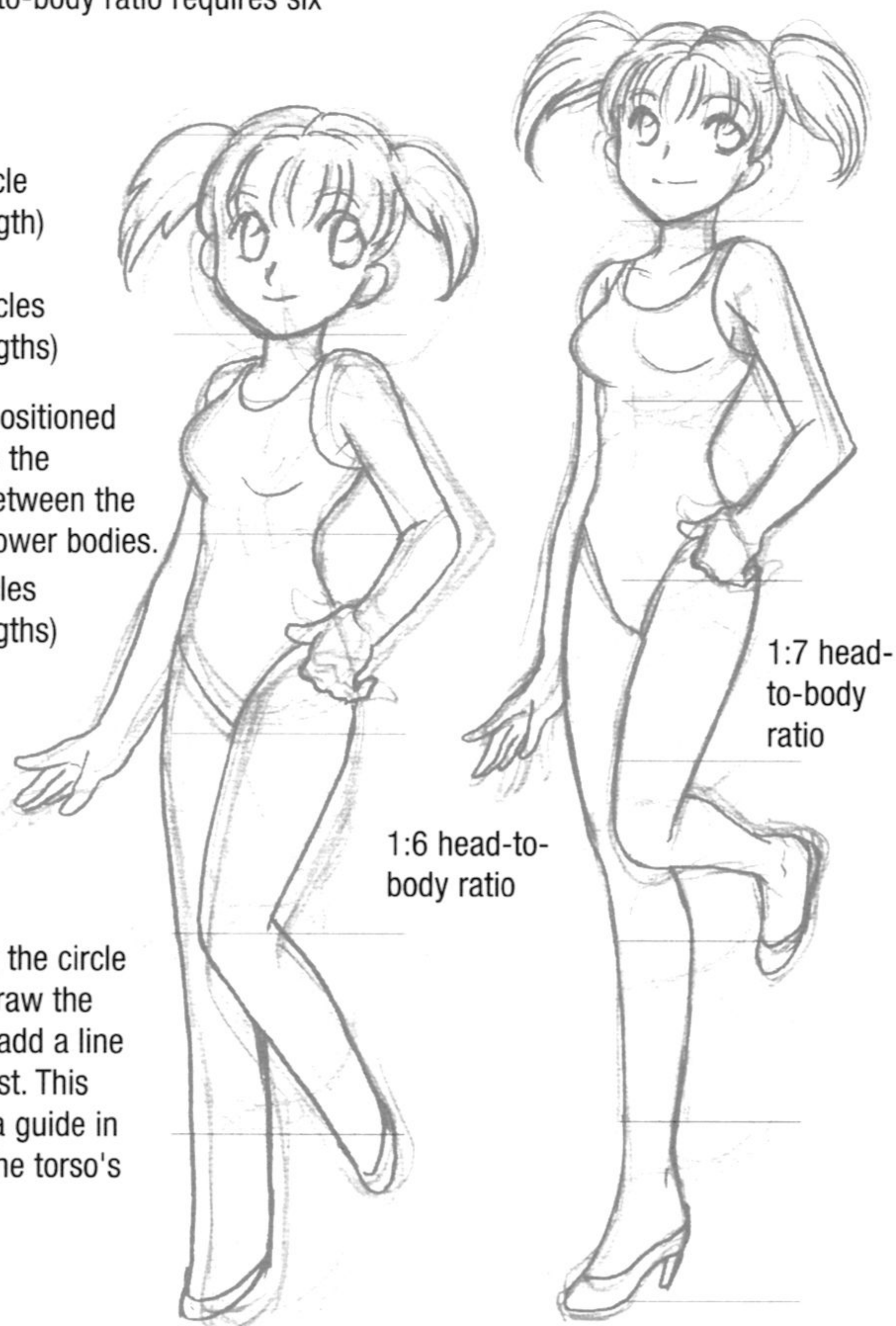
E.g. 1:6 head-to-body ratio requires six circles.



The circle layout establishes the lengths of the upper and lower bodies.



After using the circle layout to draw the torso unit, add a line for the waist. This serves as a guide in adjusting the torso's contours.



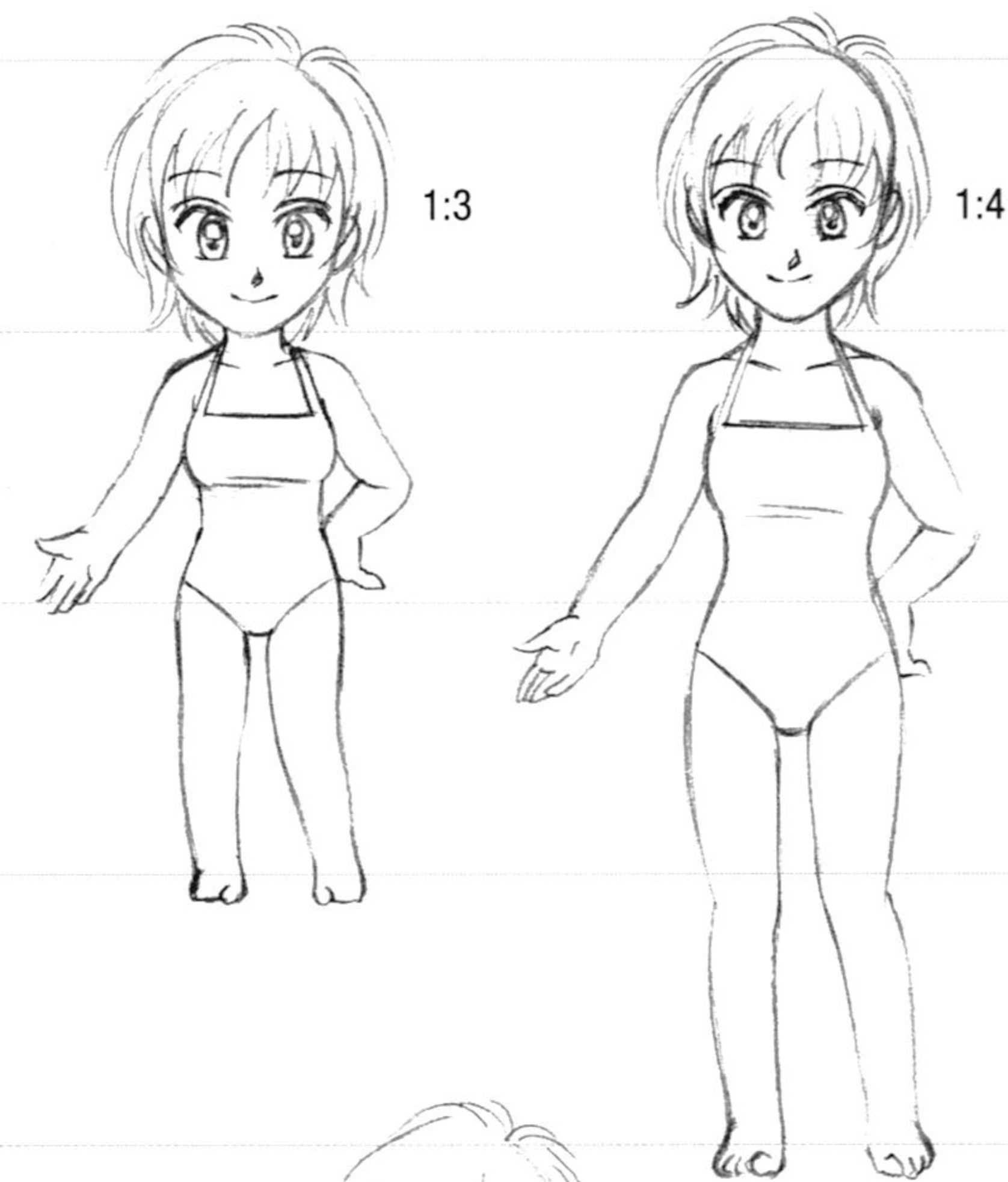
The "taller" the head-to-body ratio makes the character appear (i.e. the more head-lengths used in the proportioning), the more oblong in shape the face will become.

Assorted Head-to-Body Ratios at a Glance

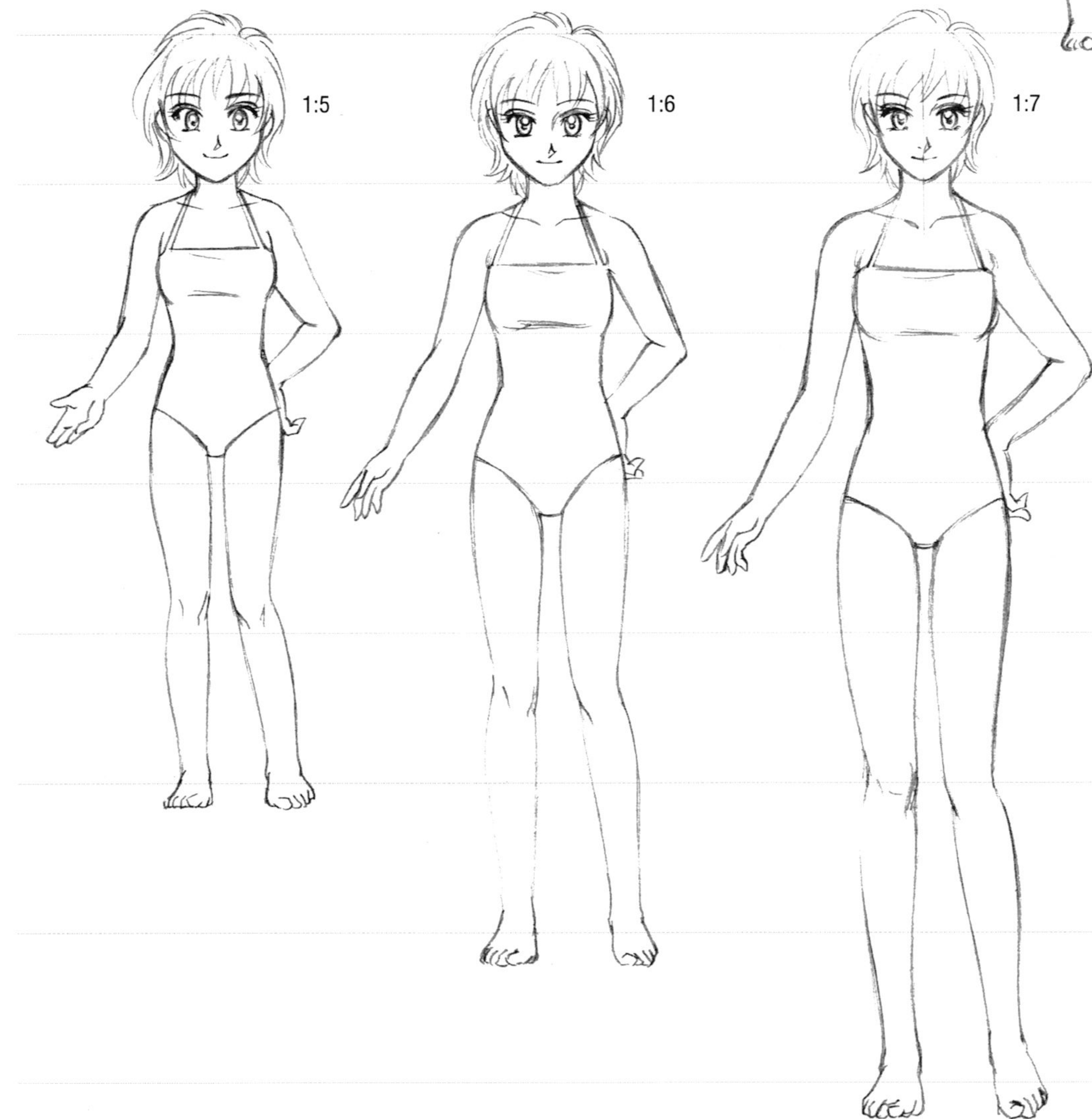
Unnatural (Artistic License-reflected)
Head-to-Body Ratios



Actual Head-to-Body Ratios (Children)

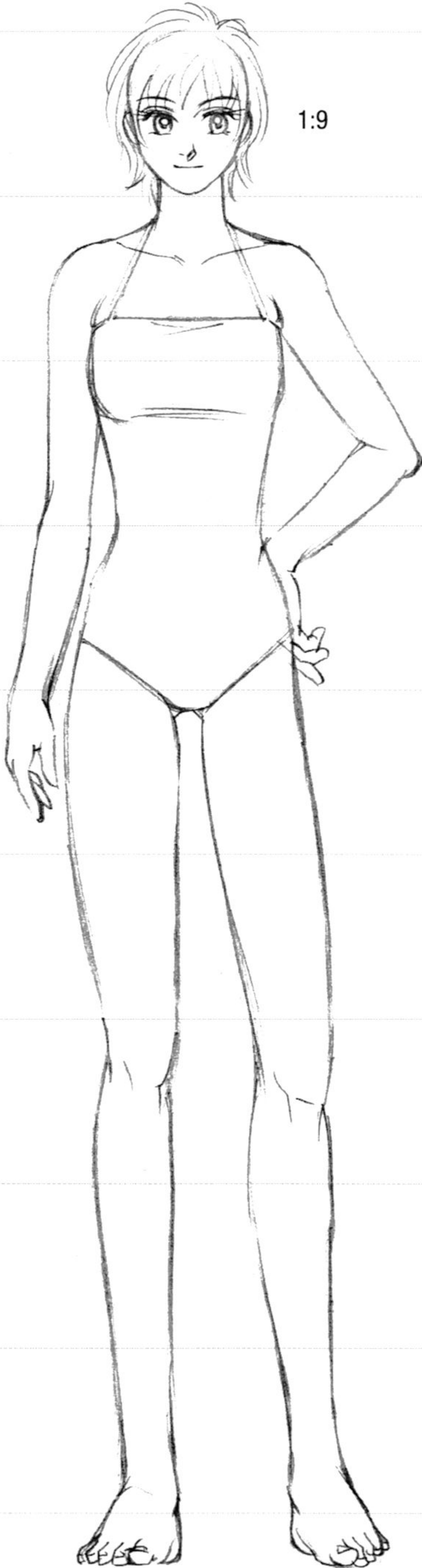
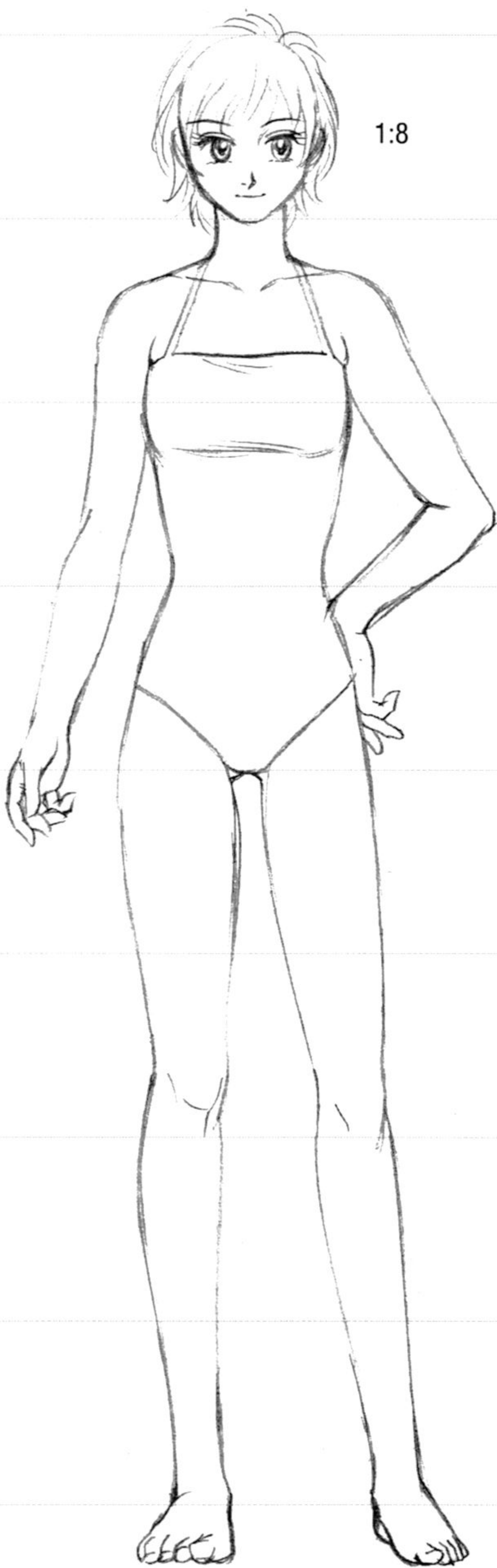


Actual Head-to-Body Ratios



Unlikely Head-to-Body Ratios

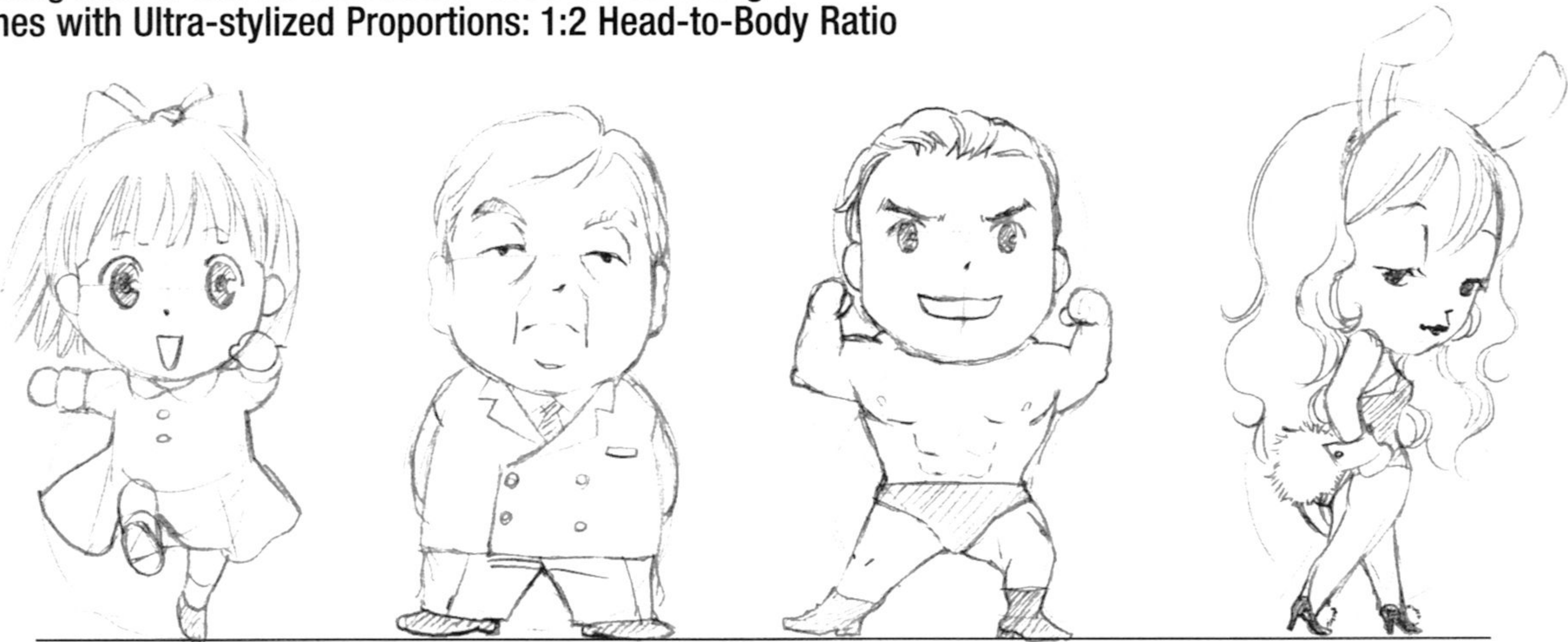
Unnatural Head-to-Body Ratio



Chibi Character Proportioning as the Basis of Head-to-Body Ratio Sketching

Chibi character design requires distilling proportional sketching down to its essence, provided that proportional balance has been achieved in the planned design. This section discusses studying *chibi* character sketching in order to master techniques in sketching, which form the basis of head-to-body ratio layout sketching.

Learning How to Sketch Characters Used in Marketing and Cutout Frames with Ultra-stylized Proportions: 1:2 Head-to-Body Ratio



Learning How to Sketch Delightful and Animated Characters for Use in Cutout Frames and *Manga*: 1:3 Head-to-Body Ratio



Learning How to Sketch *Manga* and Illustration Characters with Moderately Realistic Form and Movement: 1:4 Head-to-Body Ratio



What Is Meant by "*Chibi* Proportioning"?

Characters drawn at 1:2 to 1:4 head-to-body ratios typically have large heads and short legs. The steps to sketching a *chibi* character are essentially the same as those for sketching an attractively proportioned character: first the proportioning of the head, overall figure, and torso are established, and then the body is fleshed out. However, the simpler proportioning of a *chibi* character makes its body easier to capture. Make an effort to learn the basic proportioning of a *chibi* character by studying the sketching process.

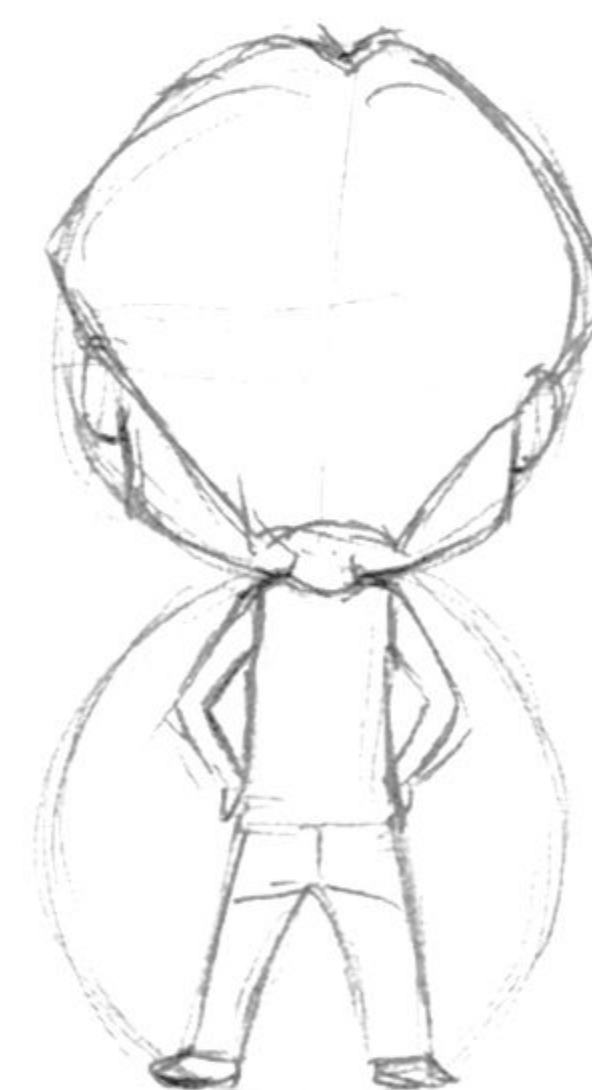
1:2 Head-to-Body Ratio

Characters drawn at a 1:2 head-to-body ratio come either with roly-poly or itsy-bitsy twiggly bodies.

Roly-poly characters have pudgy bodies, arms, and legs.



Roly-poly characters look pudgy even in profile.



The body's width varies little whether viewed from the front or side.



1: 3 Head-to-Body Ratio

When sketching, use rounded forms for the arms and legs as well as the torso.

First, do three study sketches of the character from the front, side, and back to determine how high to draw the bow and how long to make the ponytail before launching into the actual drawing of the character.



The head, torso, and arm units are clearly defined in this character, and the proportions occupied by the body parts are sufficiently large enough to allow for shading. The addition of even simple shadows enhances the characters sense of three-dimensionality.



1:4 Head-to-Body Ratio

Use a slim character design for the limbs as well as the torso.



Use simple, pole-shaped arms and legs, including at the ankle, to achieve that adorableness distinctive to *chibi* characters.

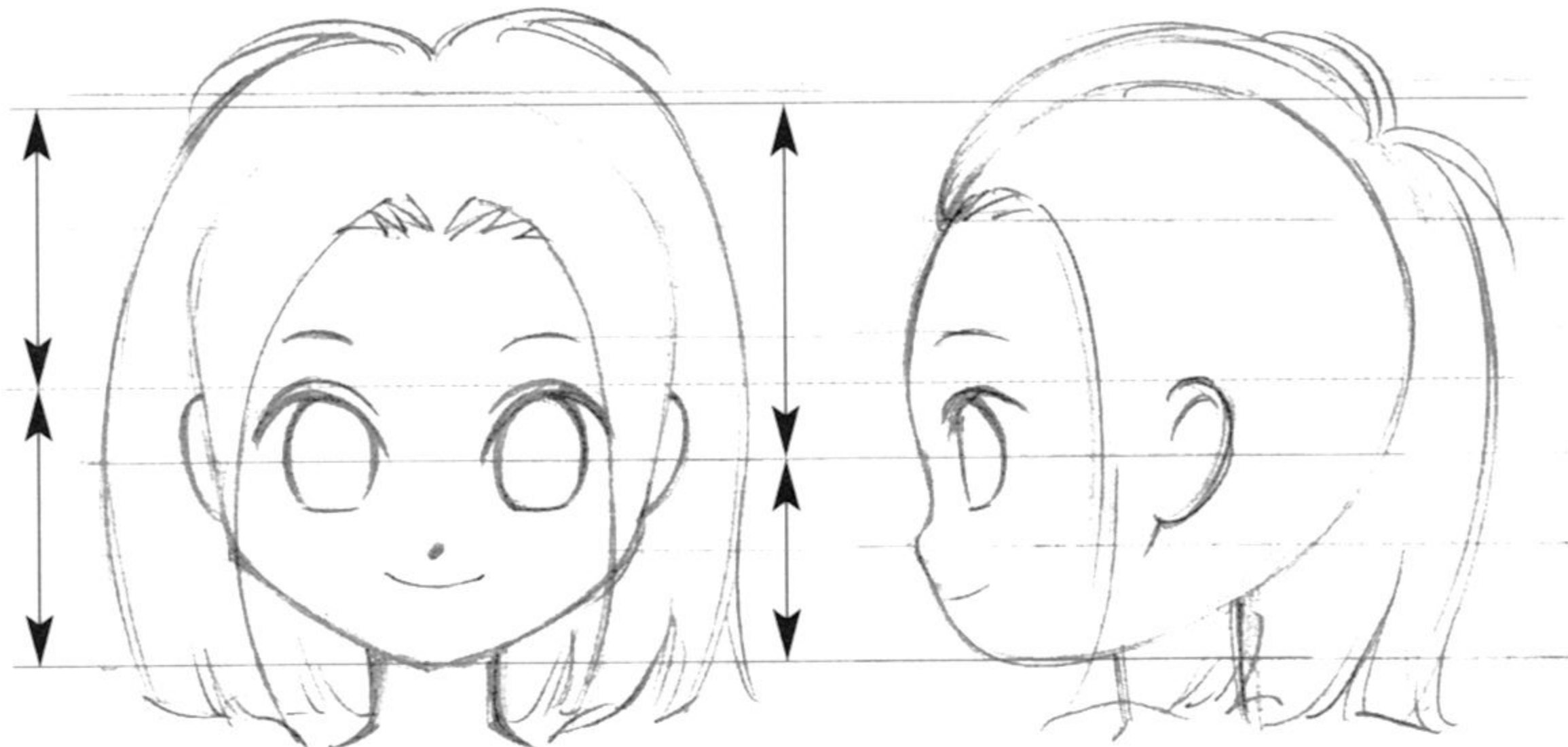
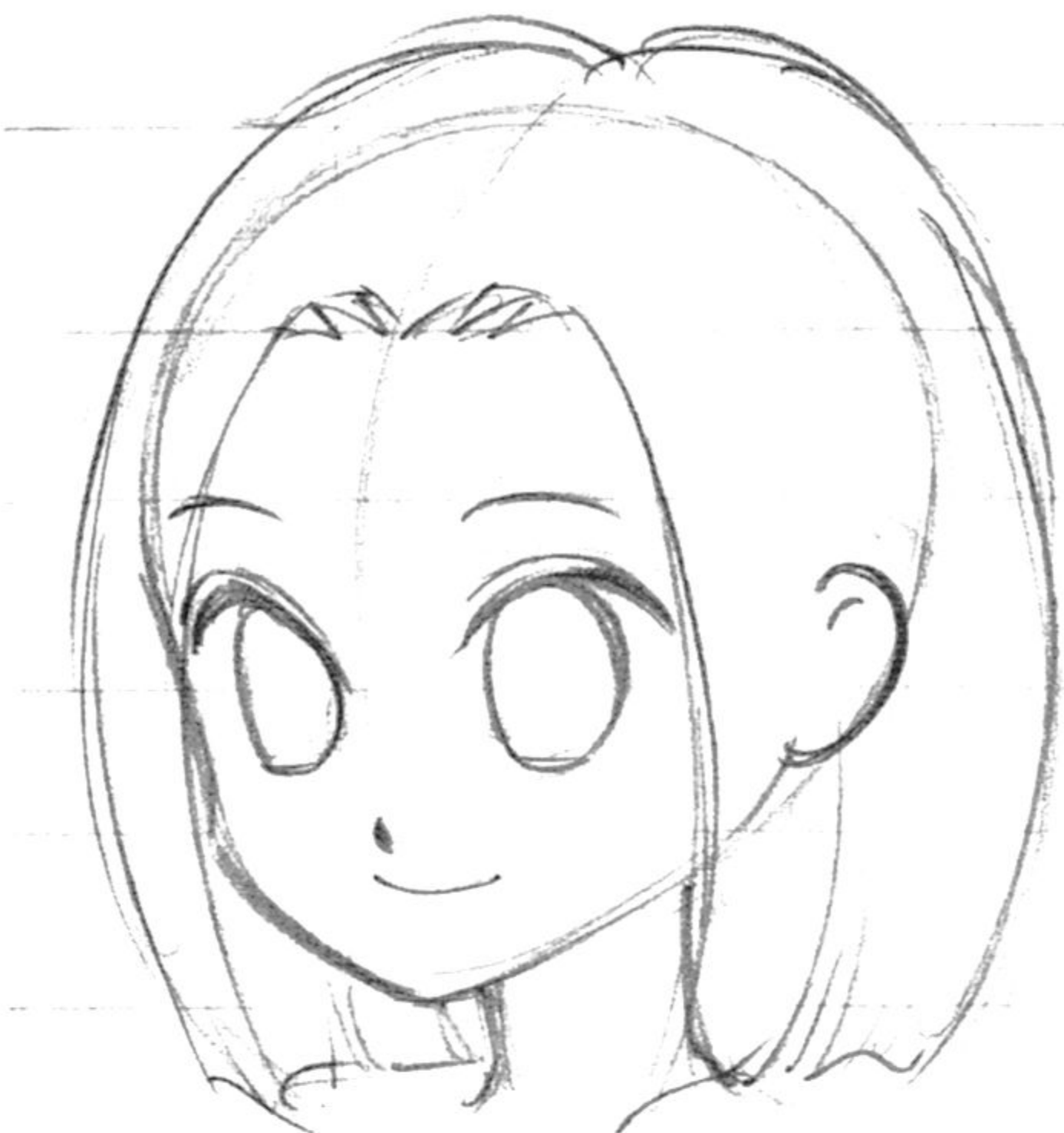


While the addition of clothing creases is permissible with a 1:4 ratio, these characters can still be adequately portrayed without drawing much detail.

Drawing the Face: Sketching and Stylization

Chibi character faces are essentially the face of a child. When drawing a *chibi* character, stylize the eyes and hair in the same manner that you would when sketching a child's face.

Proportioning a Childlike Face

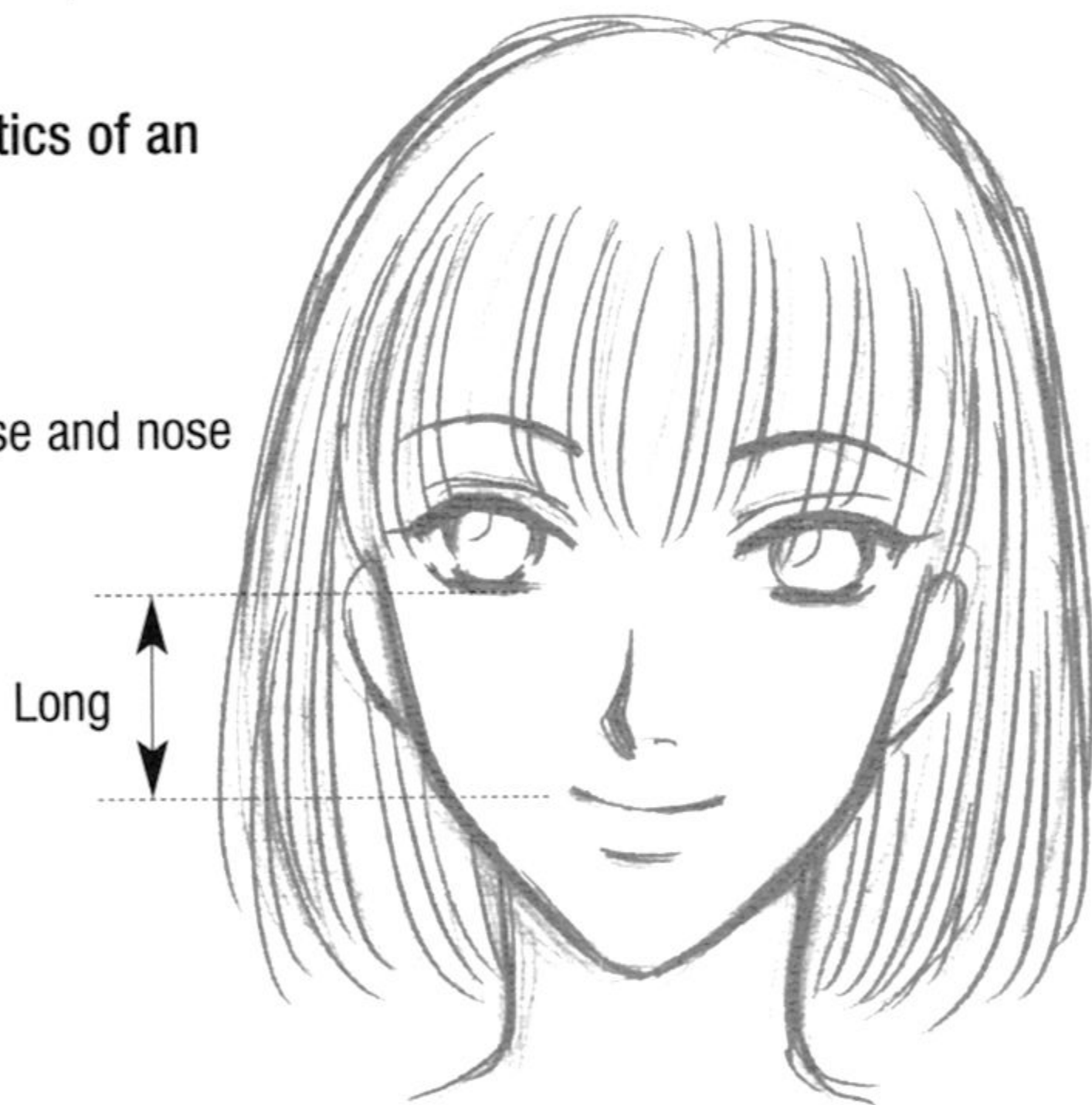


The distinguishing feature of the child is that the portion of head not containing the face is larger than that occupied by the face. Giving the hair plenty of volume results in a larger head, which creates a childlike appearance.

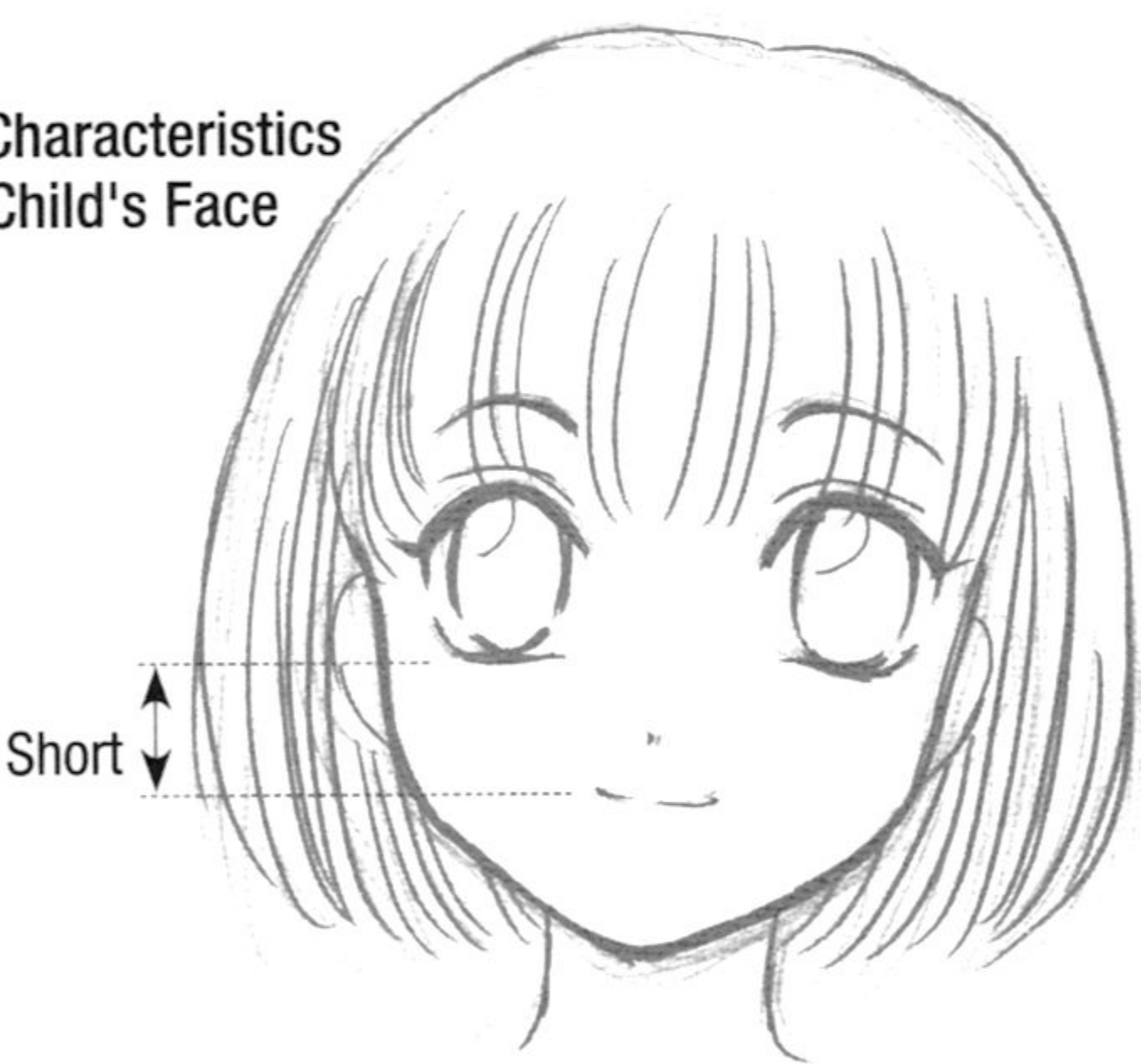
Key Points in Transforming an Attractive Adult Face into a *Chibi*-proportioned Child's Face

Key Characteristics of an Adult's Face

Oblong face
Small eyes
Presence of a nose and nose bridge



Key Characteristics of a Child's Face



- Children's faces should be generally round in form.
- The eyes should be large.
- The nose and nose bridge should be minimized.

Sample Stylization and Abstraction



Original attractive adult character



This figure shows a shortened face with larger eyes. The bridge of the nose has also been shortened and simplified in form.



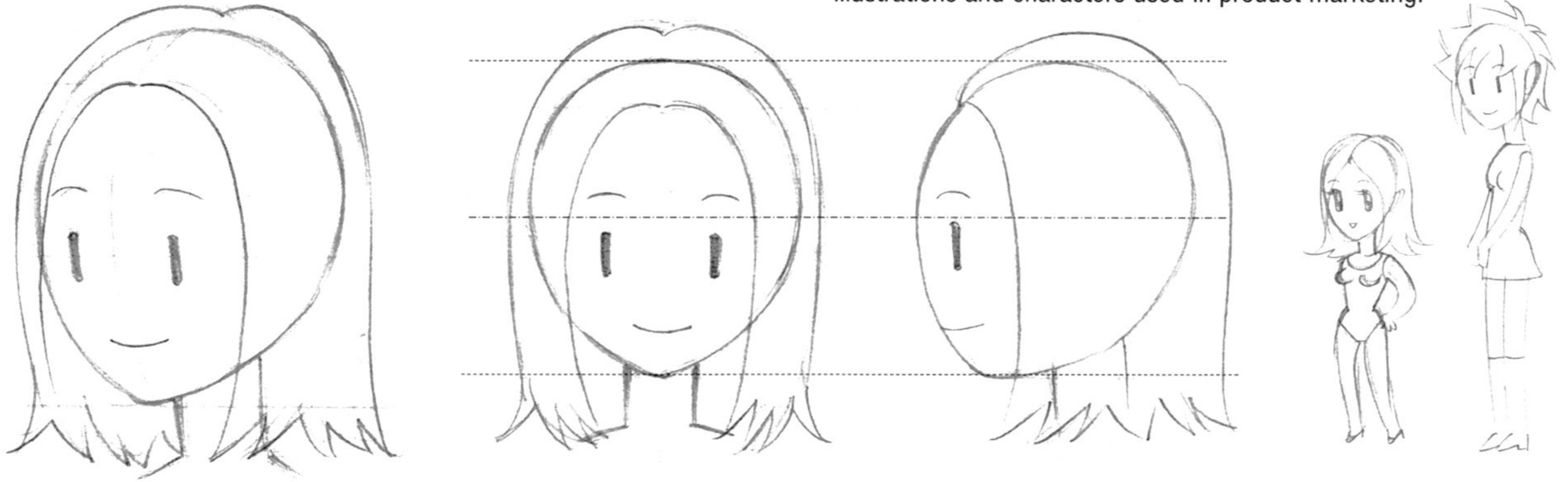
In the above, the face has been simplified and abstracted down to an ellipse. The eyes are dots, and the nose has been eliminated altogether. The overall face has been abstracted using simple contours.



Attractive adult faces and *chibi* bodies do not mix.

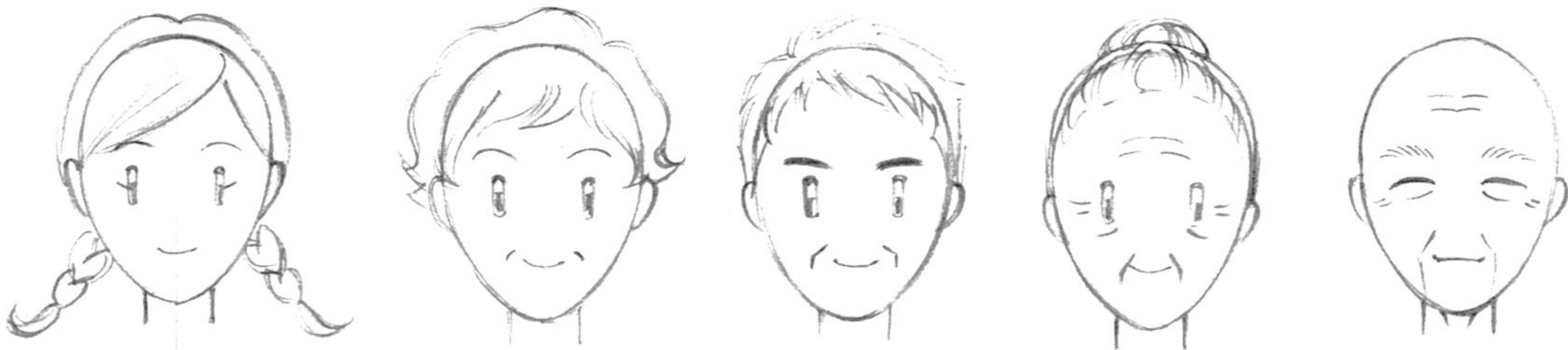
Ultra-abstracted Dots as Eyes

Characters with eyes abstracted to dots are frequently used with minimally rendered characters designed for book or magazine illustrations and characters used in product marketing.



The eyes' positions reflect the proportioning of a child's face (the eyes are positioned below the face's centerline).

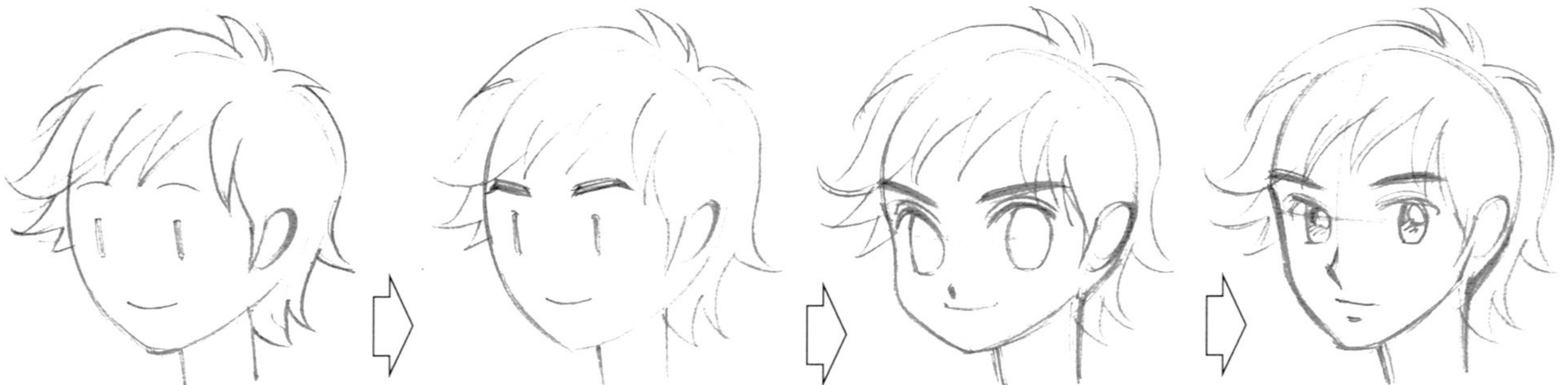
Family with Dot Eyes



These faces demonstrate the use of both lines and dots as eyes.

Simply modifying the hairstyle and eyebrows allows for the creation of an entire family of characters.

Eyebrows as a Key Feature on Male Characters



This unisex eyebrows could be used with either a male or female character.

Thickening the eyebrows makes the character appear male at a glance.

Enlarging the eyes and adding a tiny nose results in a boy drawn with *chibi* character proportions.

Making the eyes smaller and giving the nose a bridge results in an attractive youth.

Dots Used in Layouts to Represent the Eyes



Use a circle-and-X layout to determine where to draw dots for the eyes. The eyes' positions establish in which direction the head is facing.

Draw the eyes based on the dots' positions.

Adjust the exterior contours and add the hair to finish.

Drawing the Full Figure: Sketching and Stylization

This section covers how to sketch a quick layout using *chibi* character proportions.

Drawing a 1:2 Head-to-Body Ratio Character

Start by drawing two circles of the same size to create a snowman.

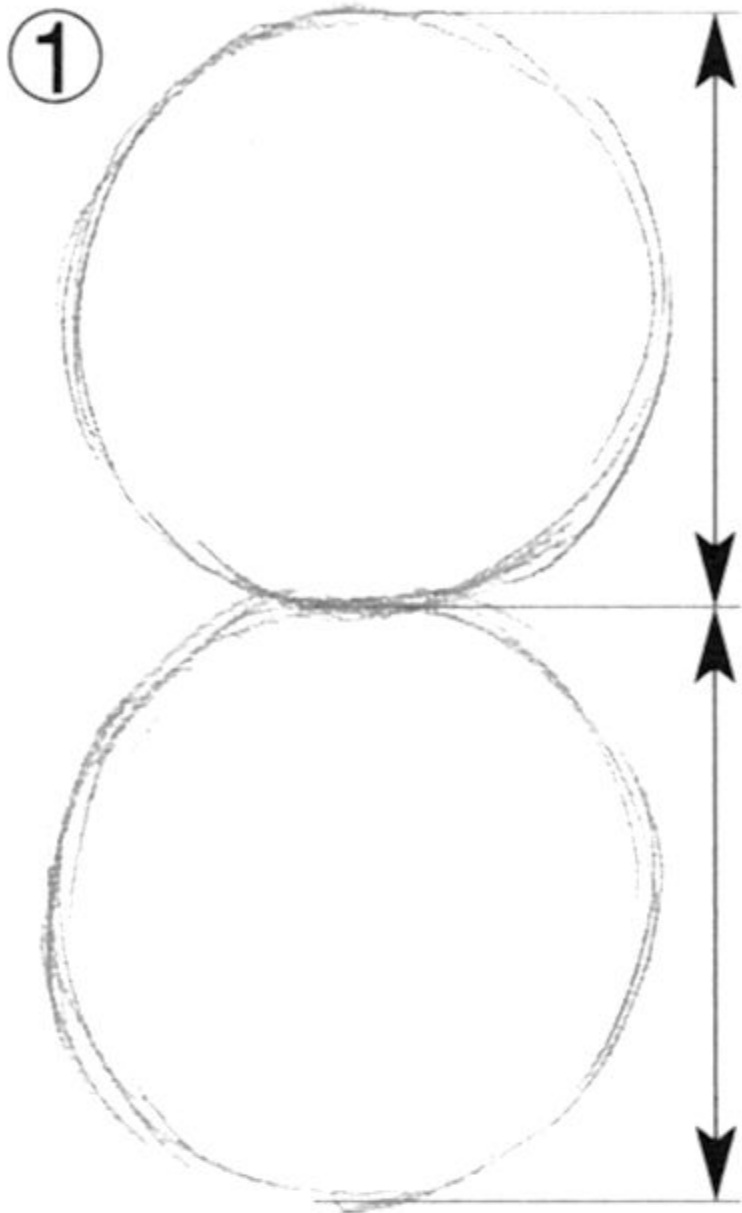


Envision a character drawn at a 1:2 head-to-body ratio as starting out as a two-ball snowman.

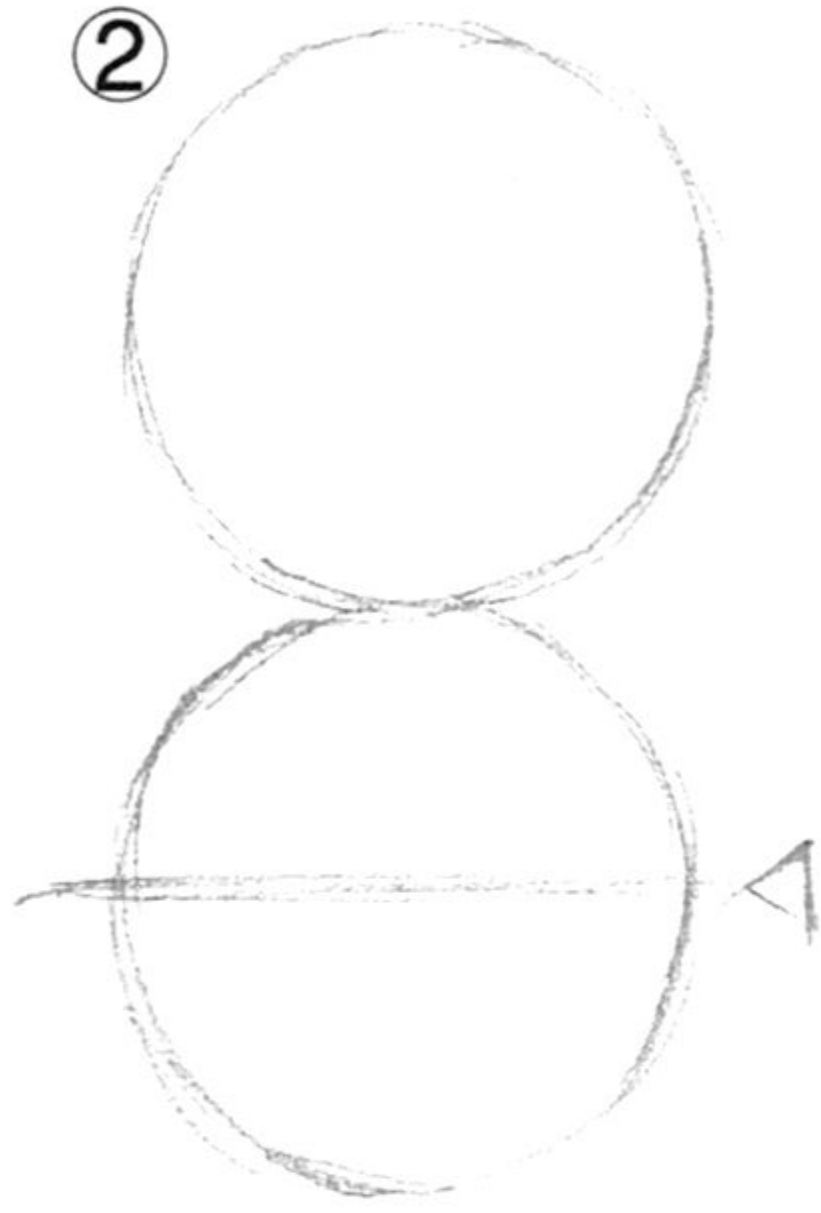


A standard character sticks out of the snowman format from the waist down.

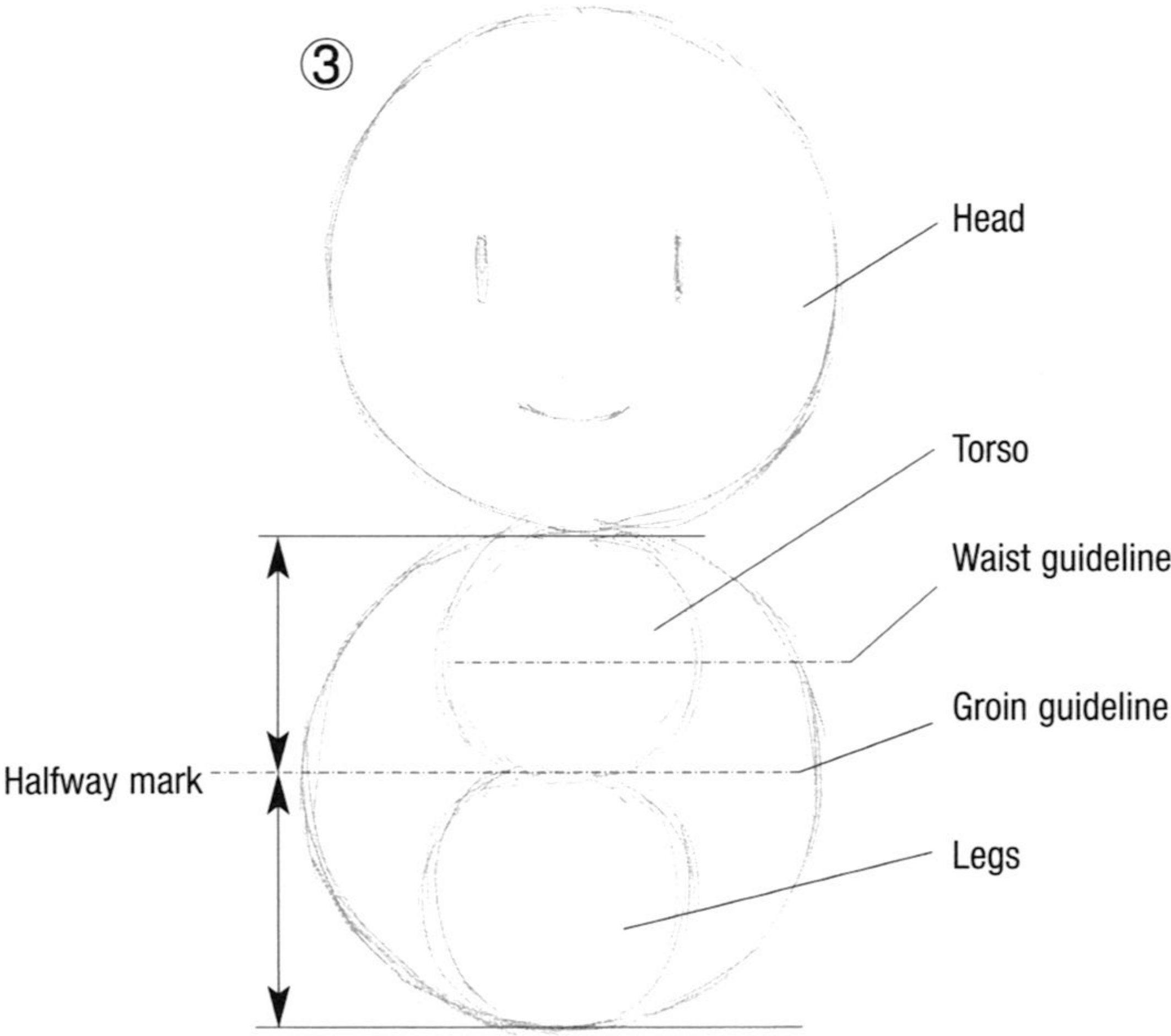
Drawing a Girl



Draw a two-ball snowman.



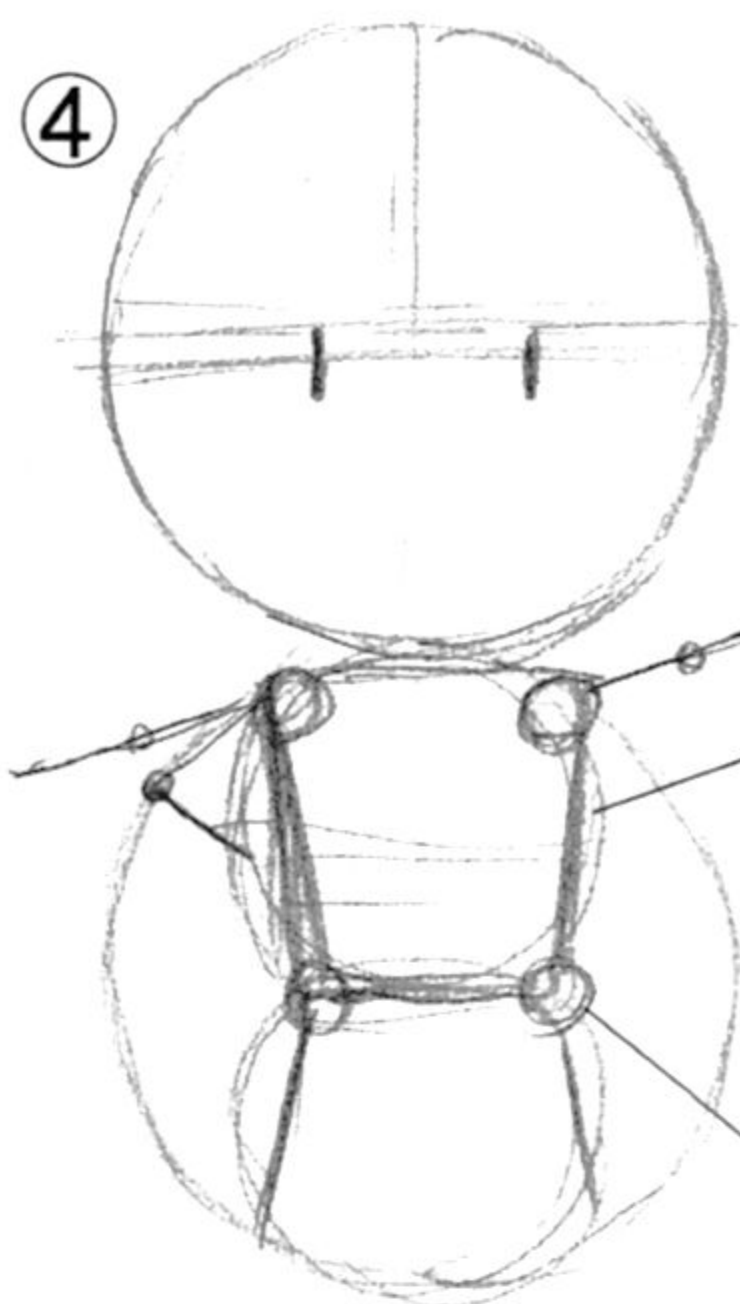
Divide the bottom snowball into half.



Draw guidelines for the torso and the legs.

1:2 head-to-body ratio character theater

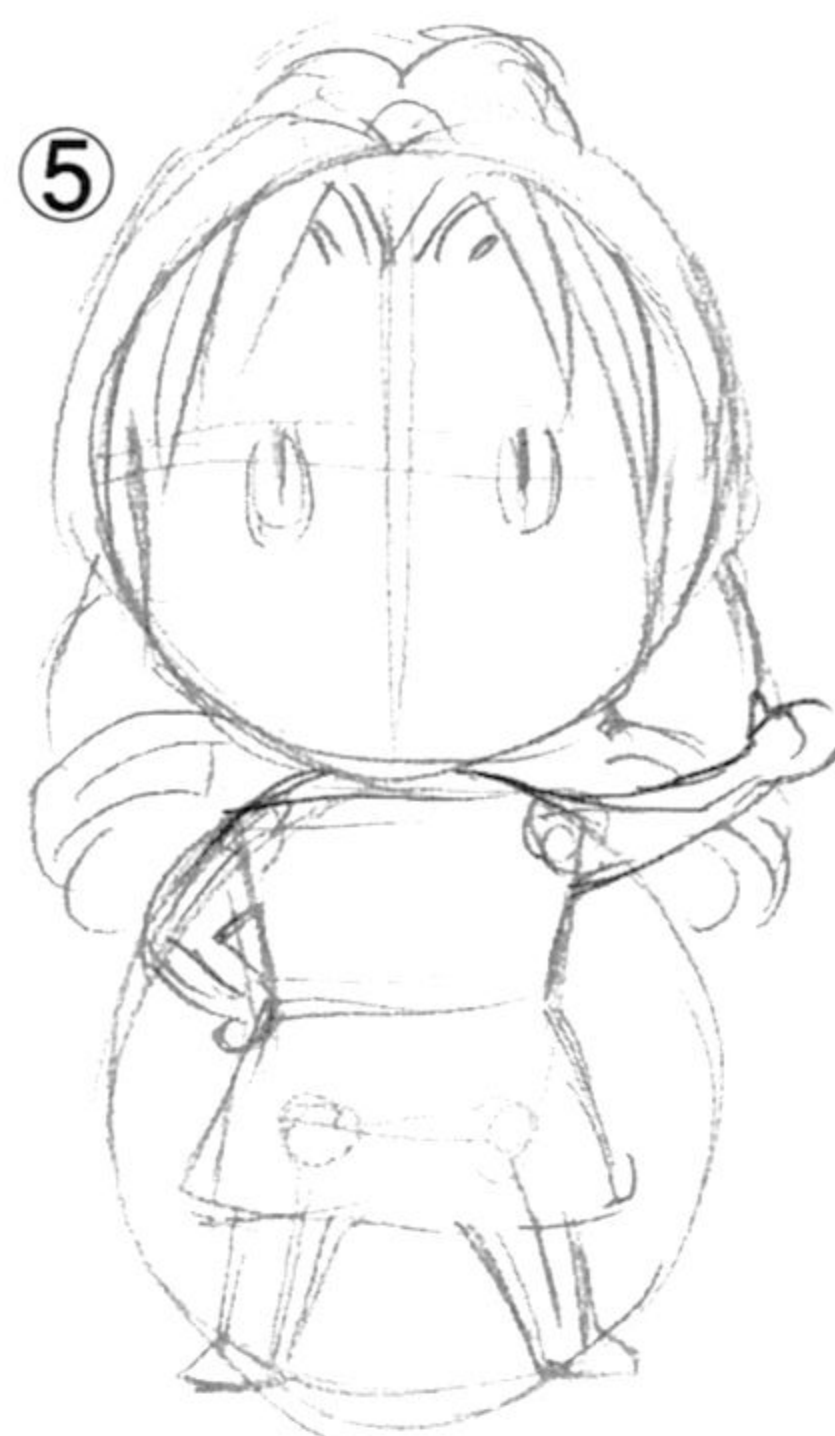




Draw layouts for the joints and sketch the arms and legs.

Use simple geometric forms for the torso's layout, such as an ellipse, a rectangle or other oblong shape.

Joint layout



Flesh out the limbs and draw the hair.



Draw the clothes and fill in the other details.



Final Image

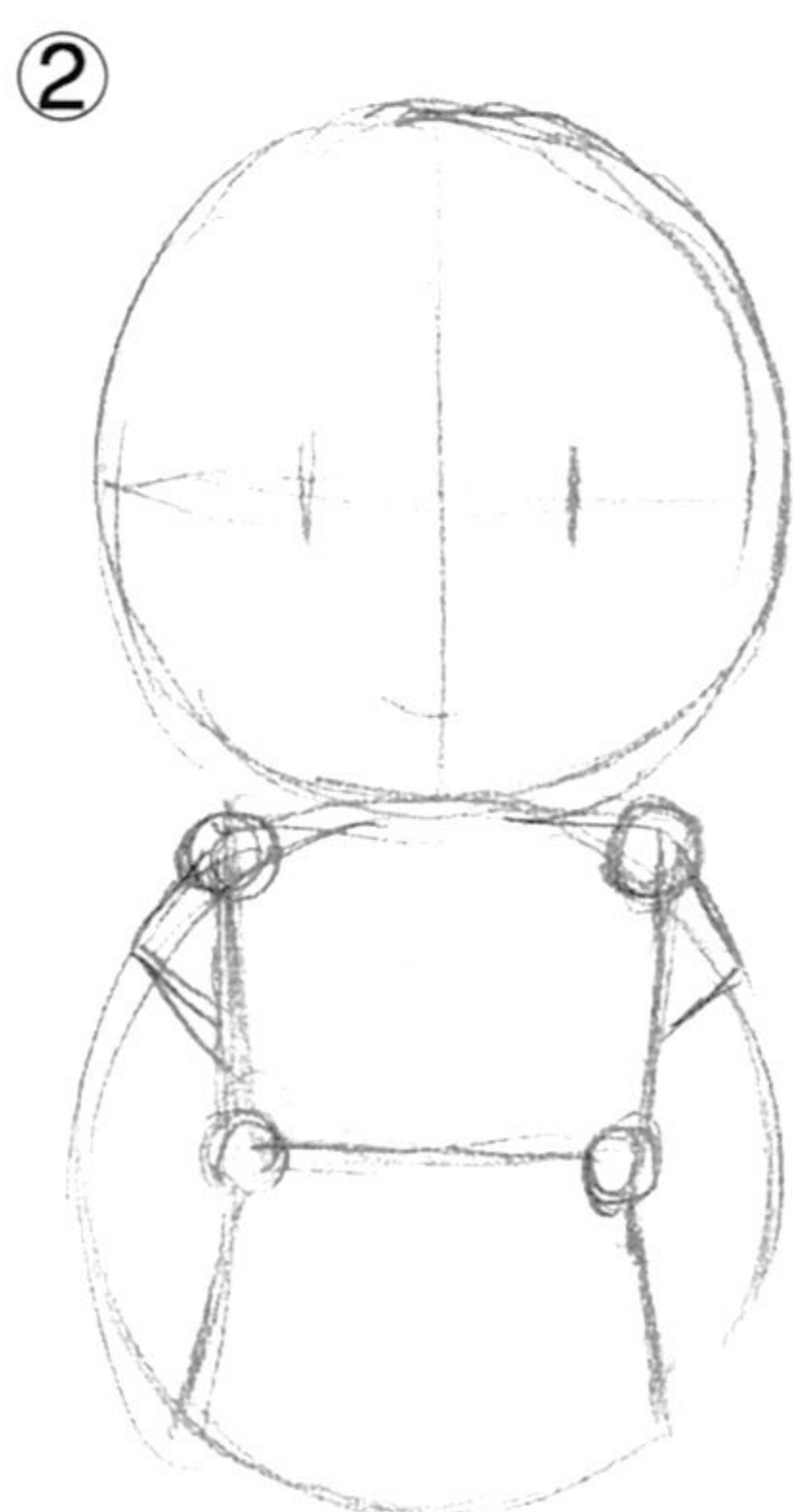


Giving the character short, roly-poly arms and legs generates a sweet, endearing atmosphere.

Drawing a Boy



The steps from drawing the snowman up to this point remain the same as when drawing a girl.



Sketch the torso's layout and add circles for the joints. The torso should be wider than that used for the girl.



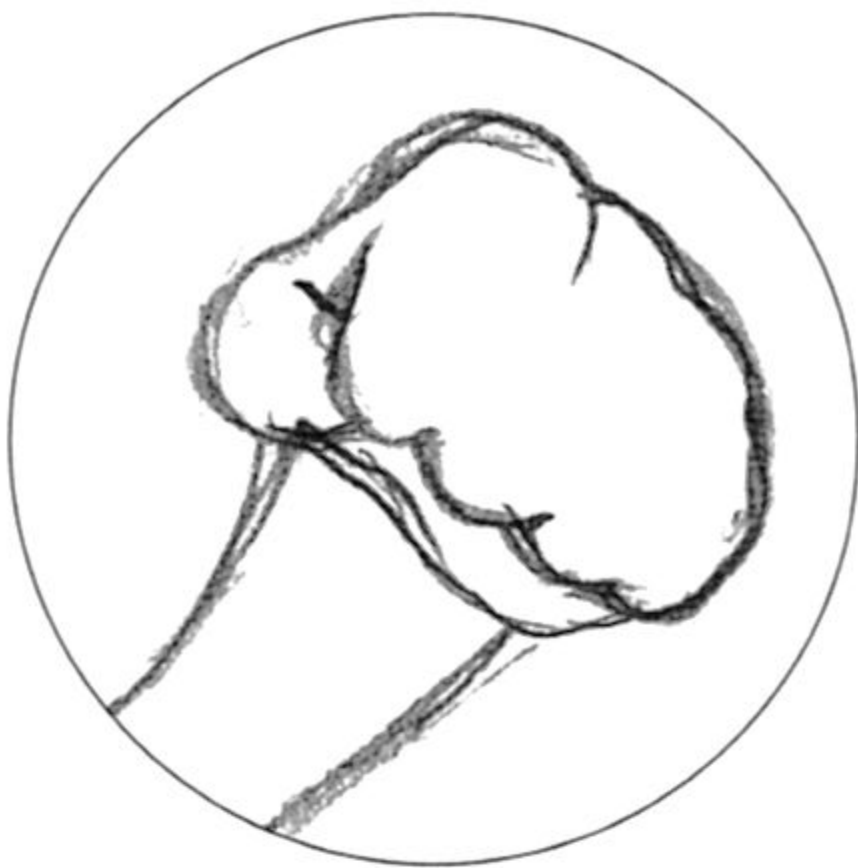
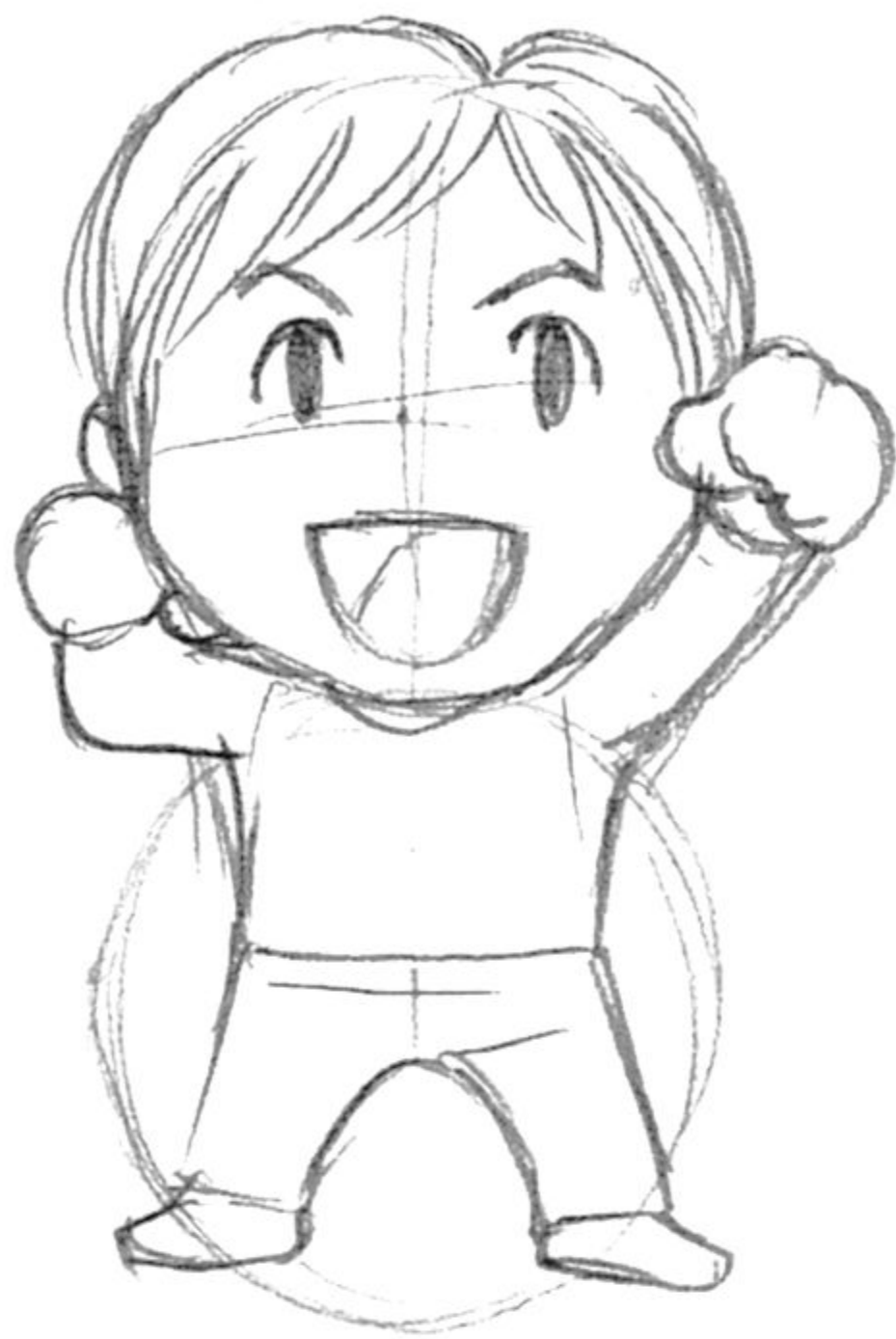
Give the character stout limbs and draw the face.



Final Image

Portraying the Hands of 1:2 Head-to-Body Ratio Characters

This section covers how to stylize the hands of a 1:2 head-to-body ratio character. In contrast with real hands, the hands of these characters tend to have shorter and thicker digits, and typically not all of the fingers are individually rendered.



Rock (Gripping)



Sample fist of an attractive (tall) character
(Hands underneath those drawn within circles represent sample hands of attractively proportioned characters.)



Scissors



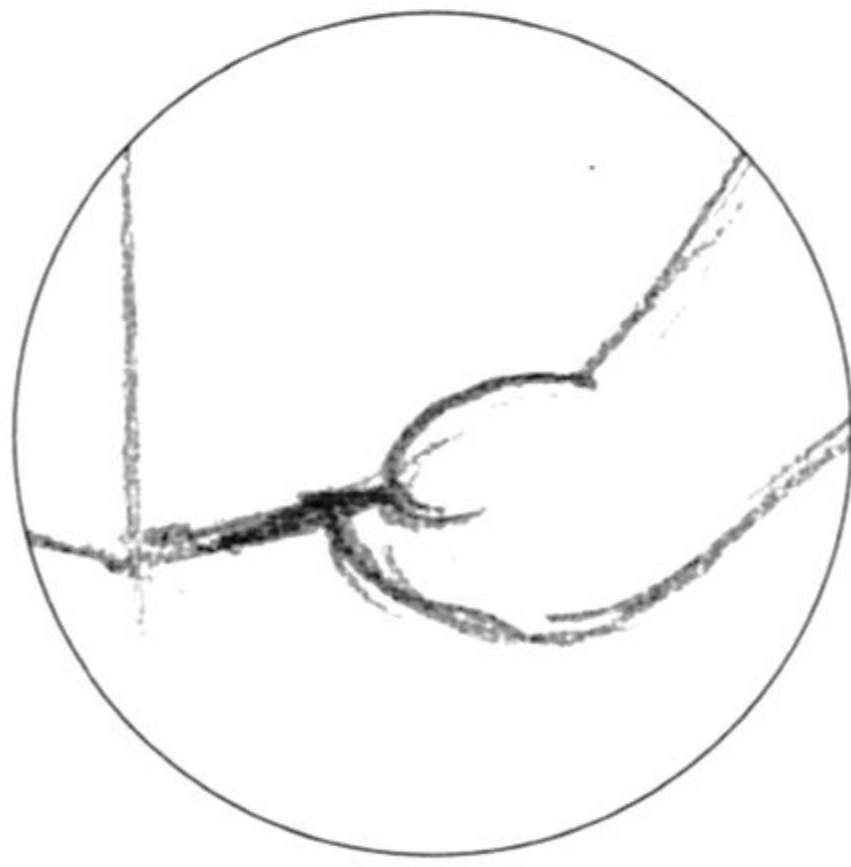
Paper (Open hand)



Lightly clenched hand



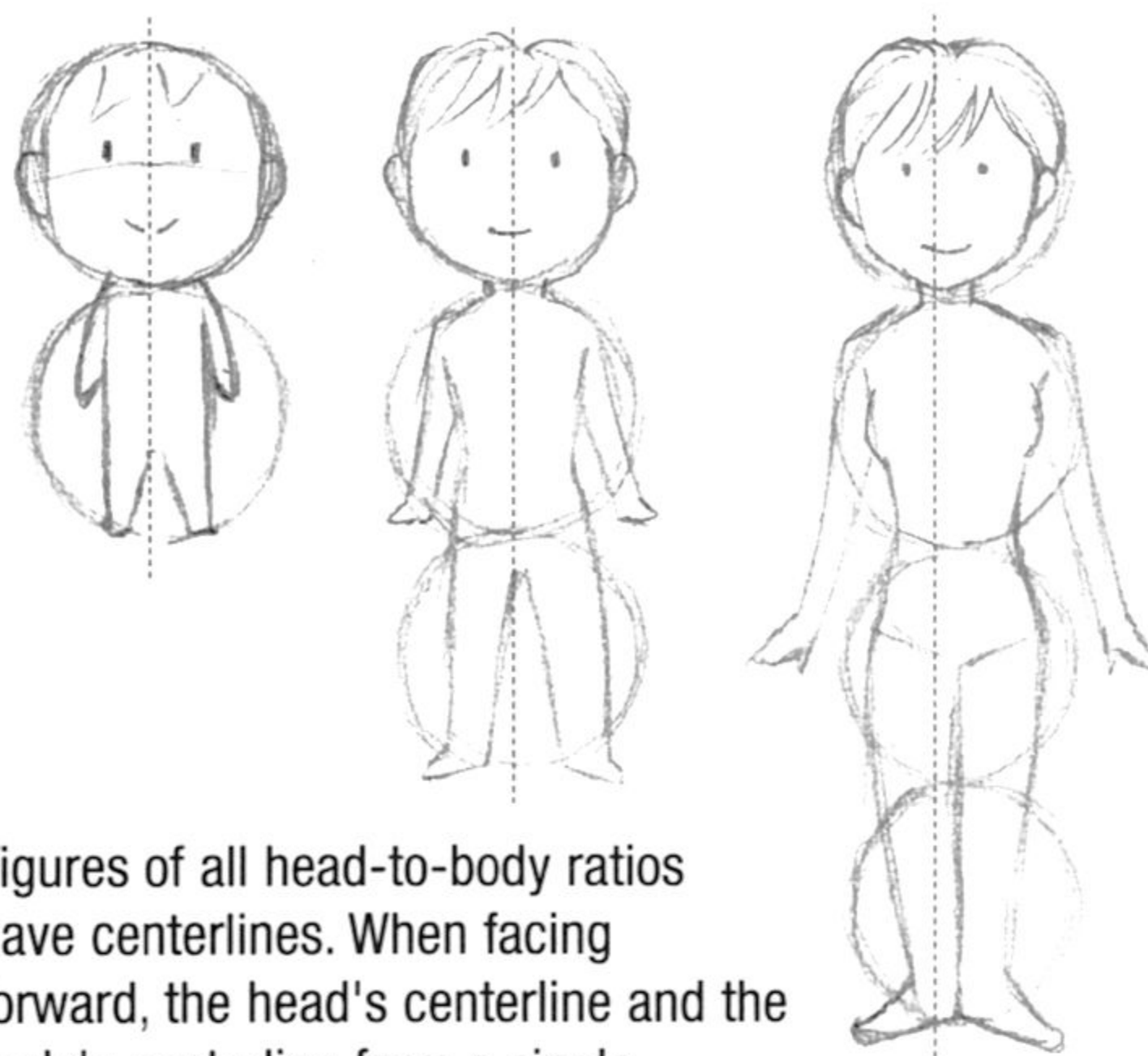
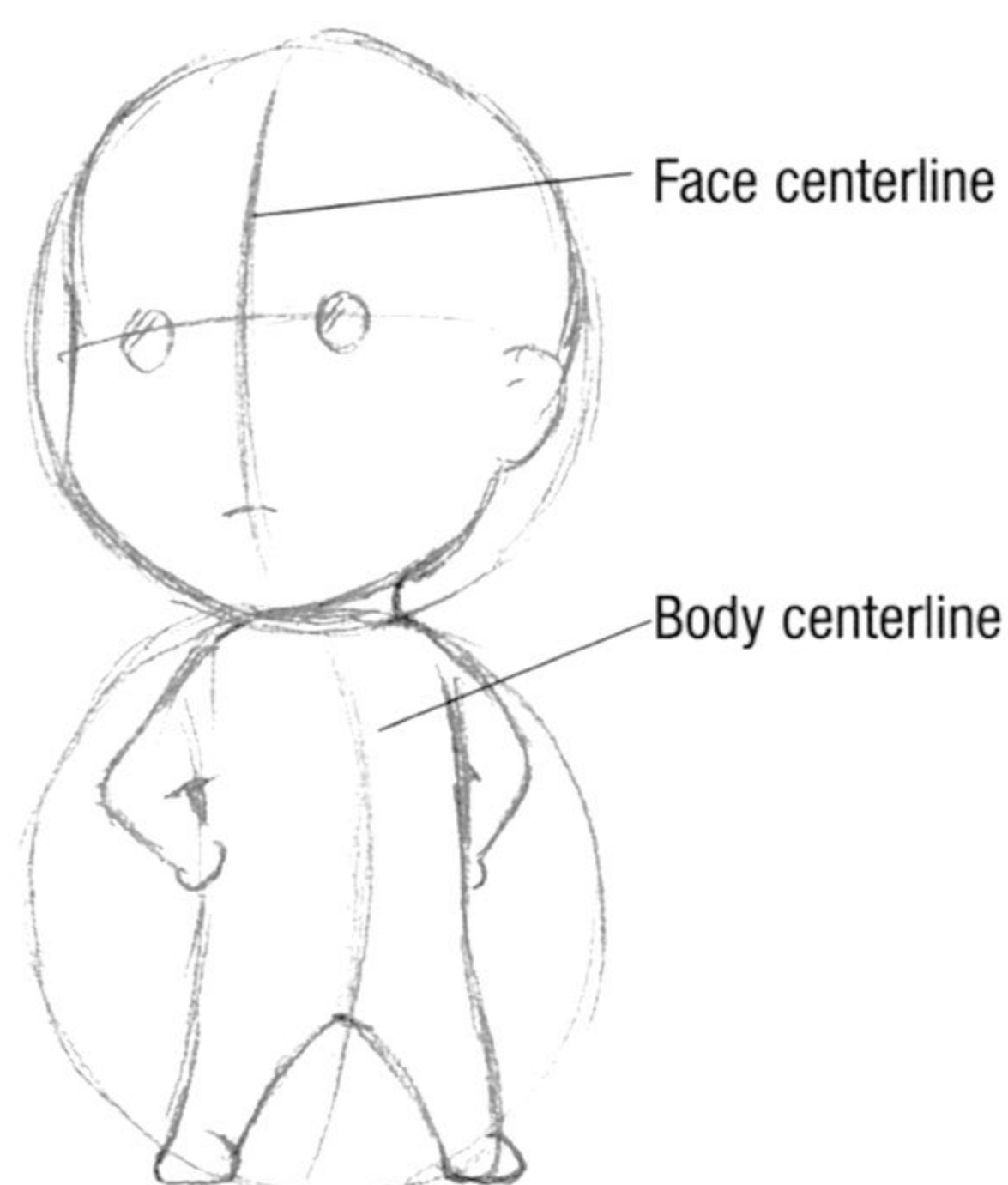
Hands covering the mouth



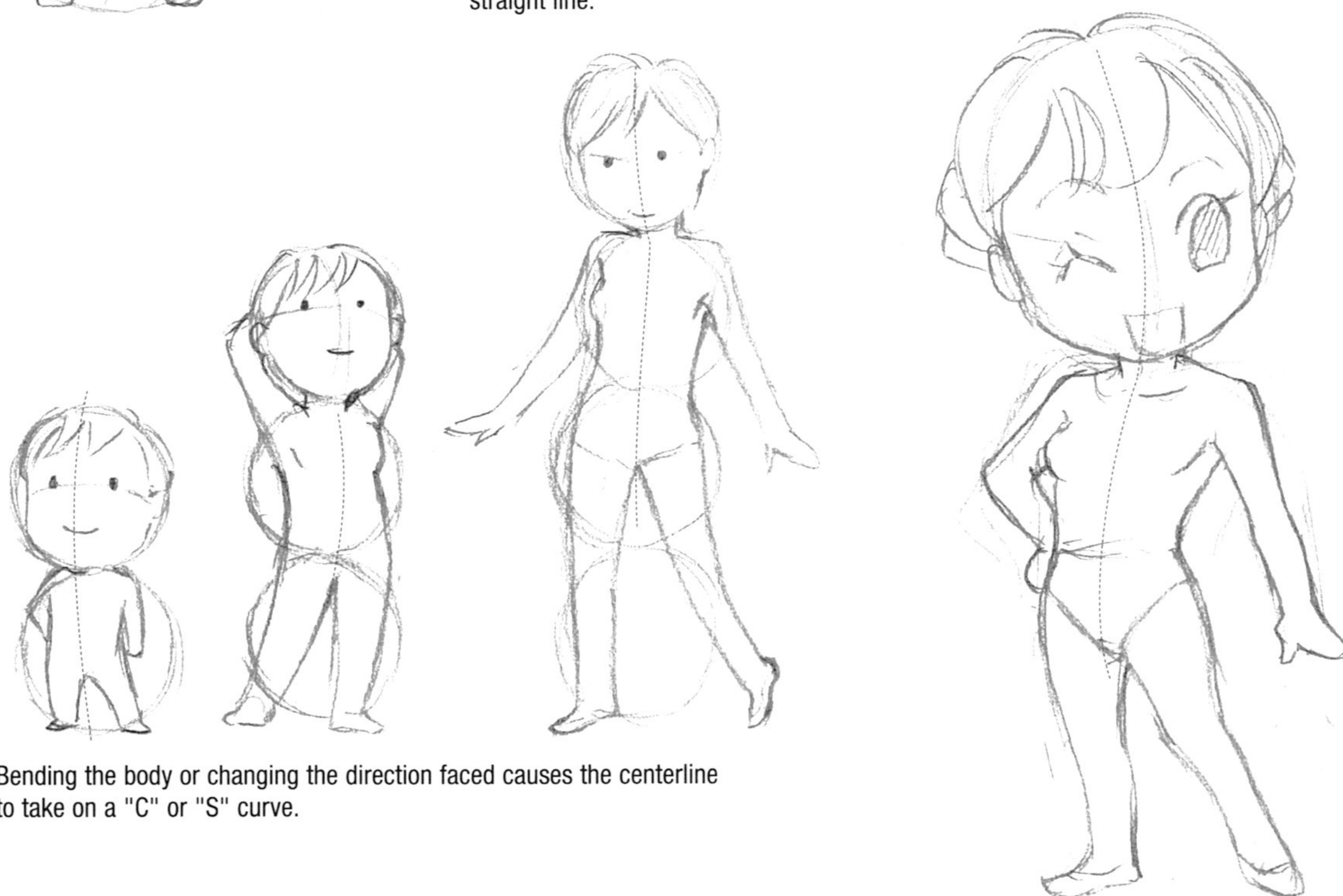
Hands carrying an object



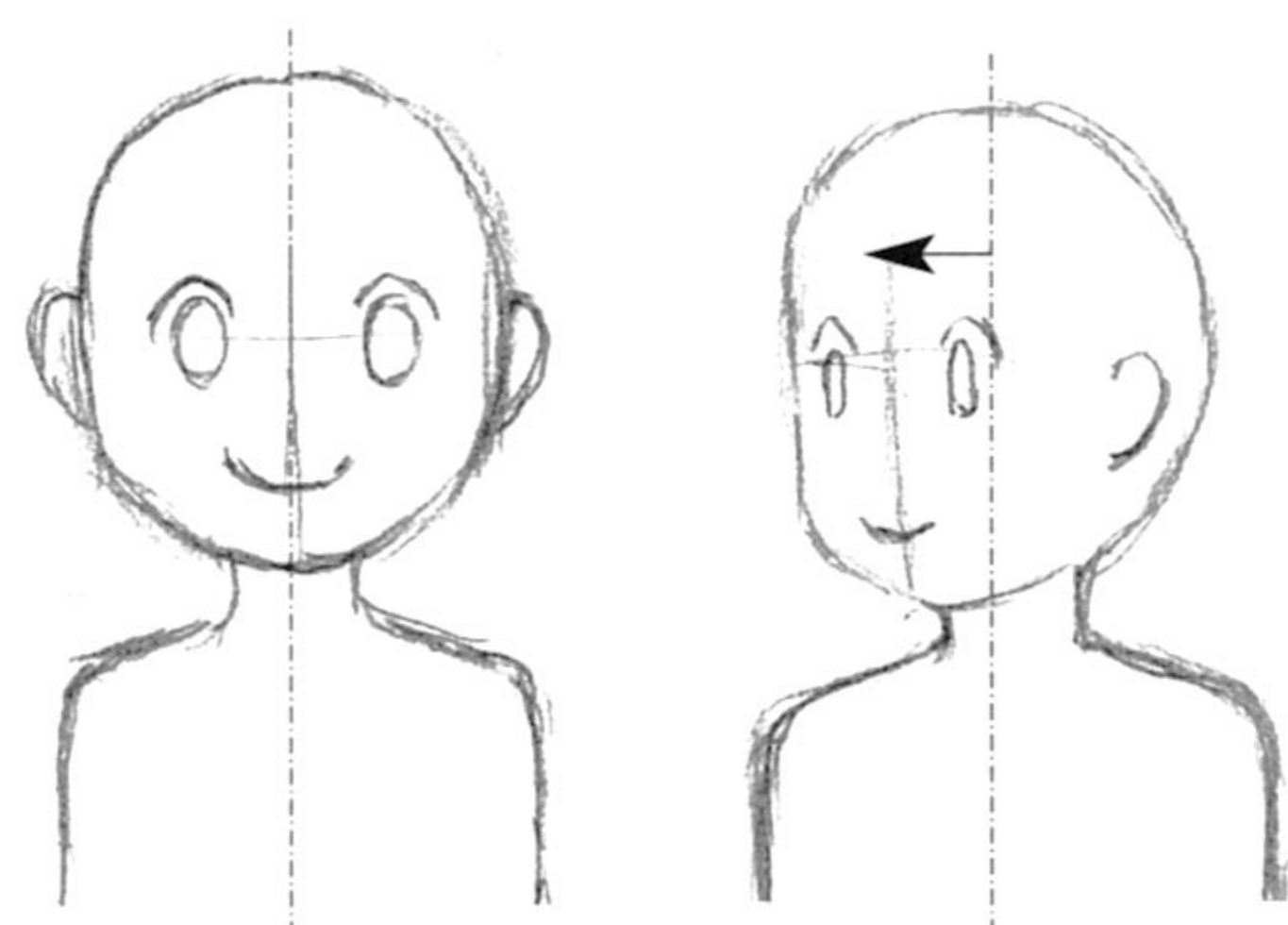
Even *Chibis* Have Centerlines



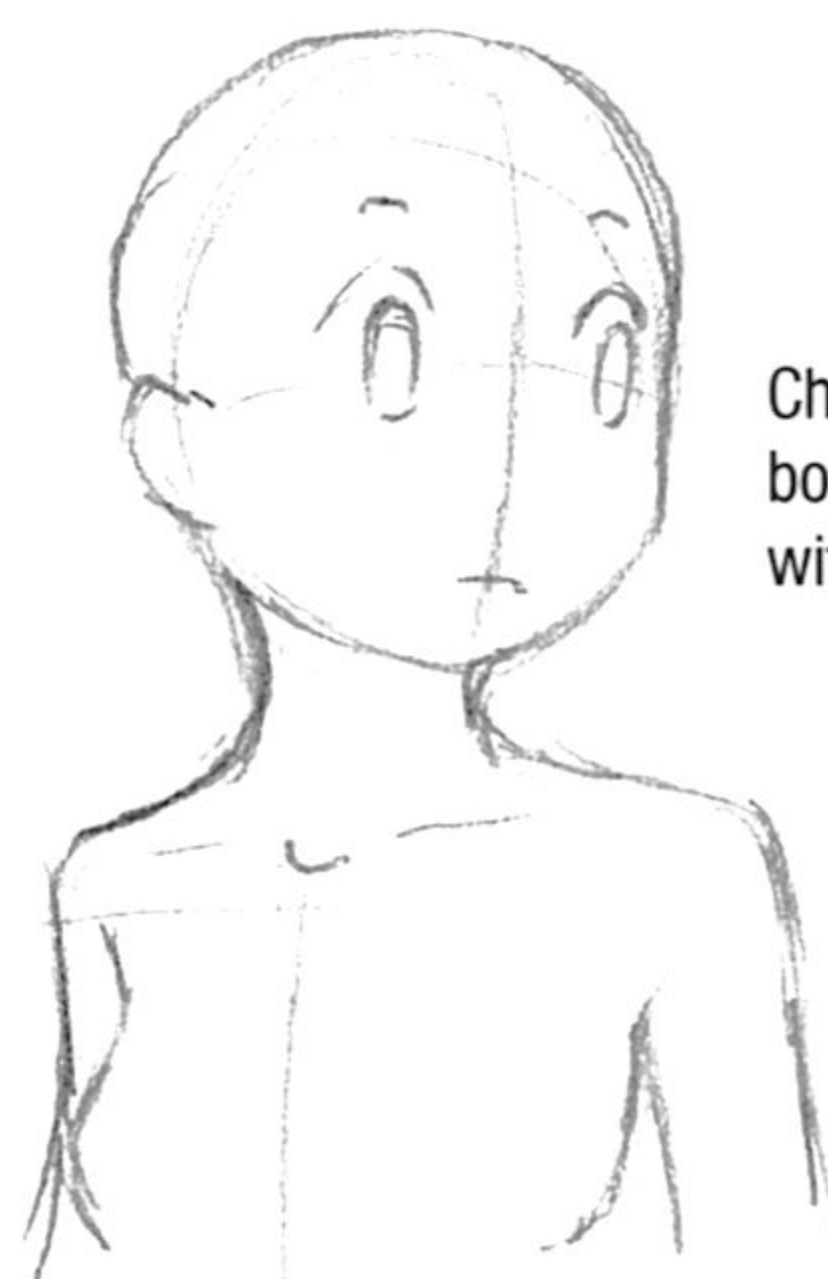
Figures of all head-to-body ratios have centerlines. When facing forward, the head's centerline and the body's centerline form a single, straight line.



Bending the body or changing the direction faced causes the centerline to take on a "C" or "S" curve.



When the head turns to the side, the centerline shifts to the side as well. Since the body seen above remains facing forward, the centerline does not change.



Changing the direction the head or body faces generates a movement with torsion.

In the figure to the left, the head faces right while the body faces left.

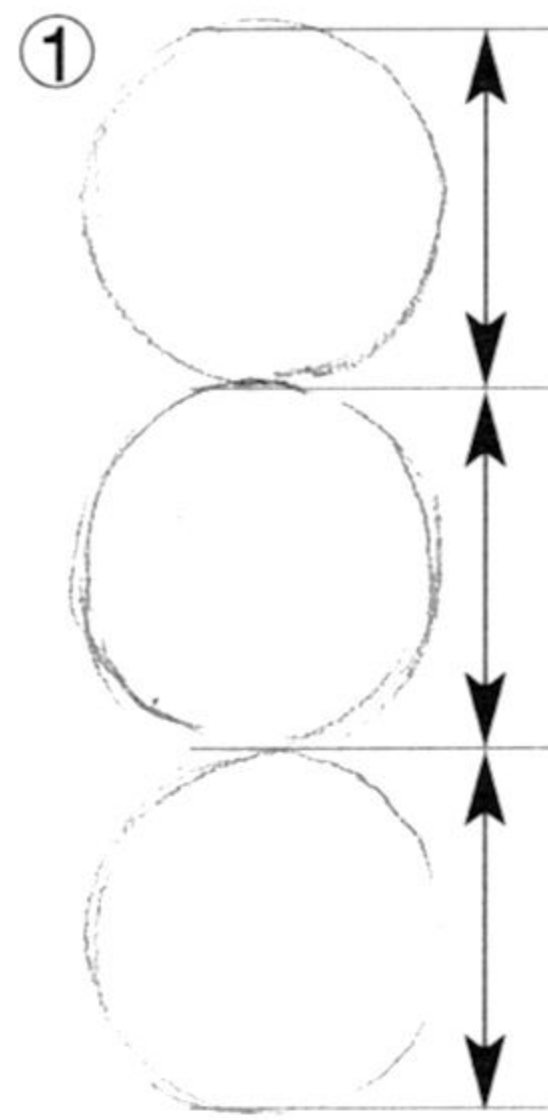
Maintaining awareness of the face and torso's centerlines helps to draw the character in dynamic poses.

Drawing a 1:3 Head-to-Body Ratio Character

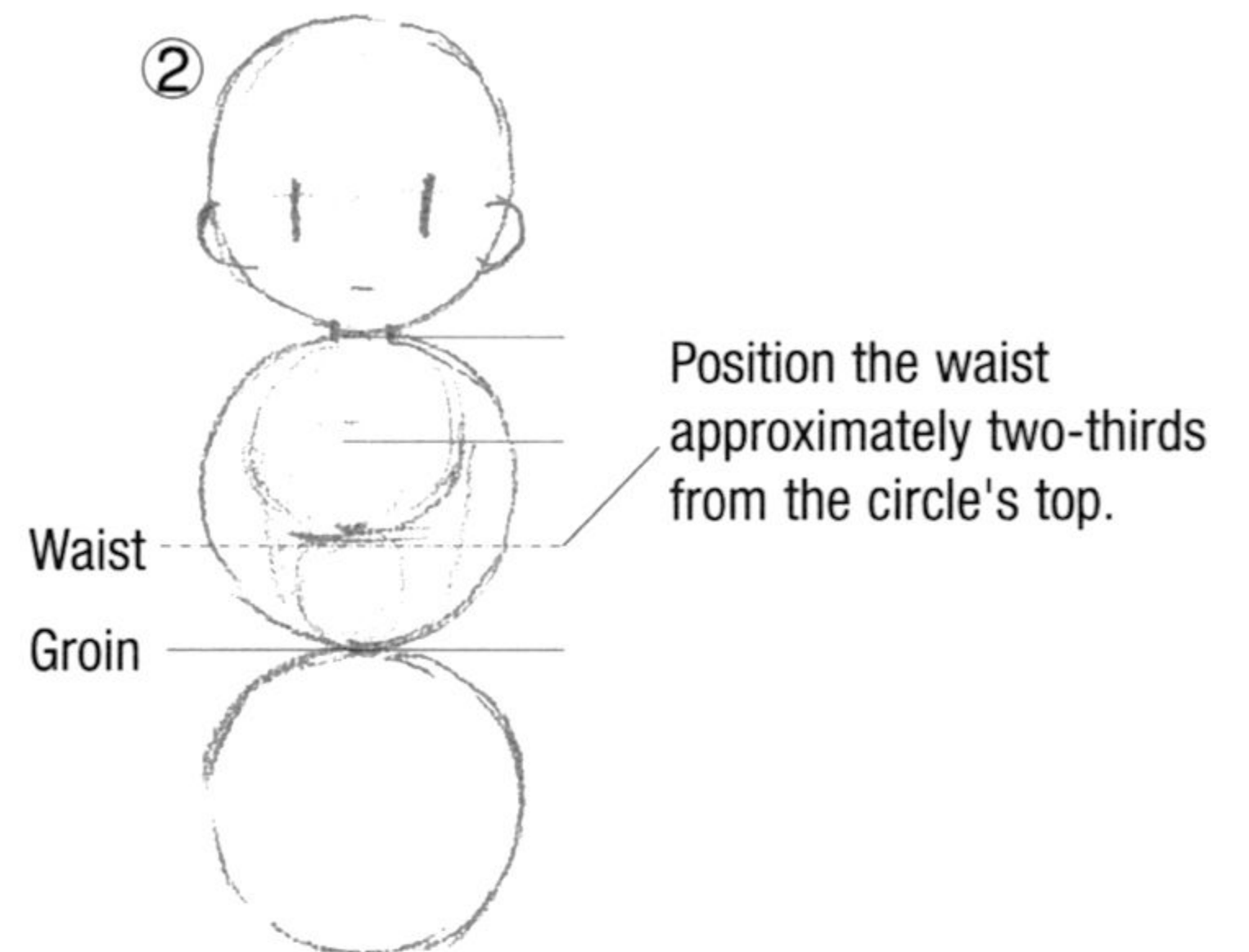
Start by drawing three circles of the same size to create a snowman.



Envision this character seated within a two-ball snowman.



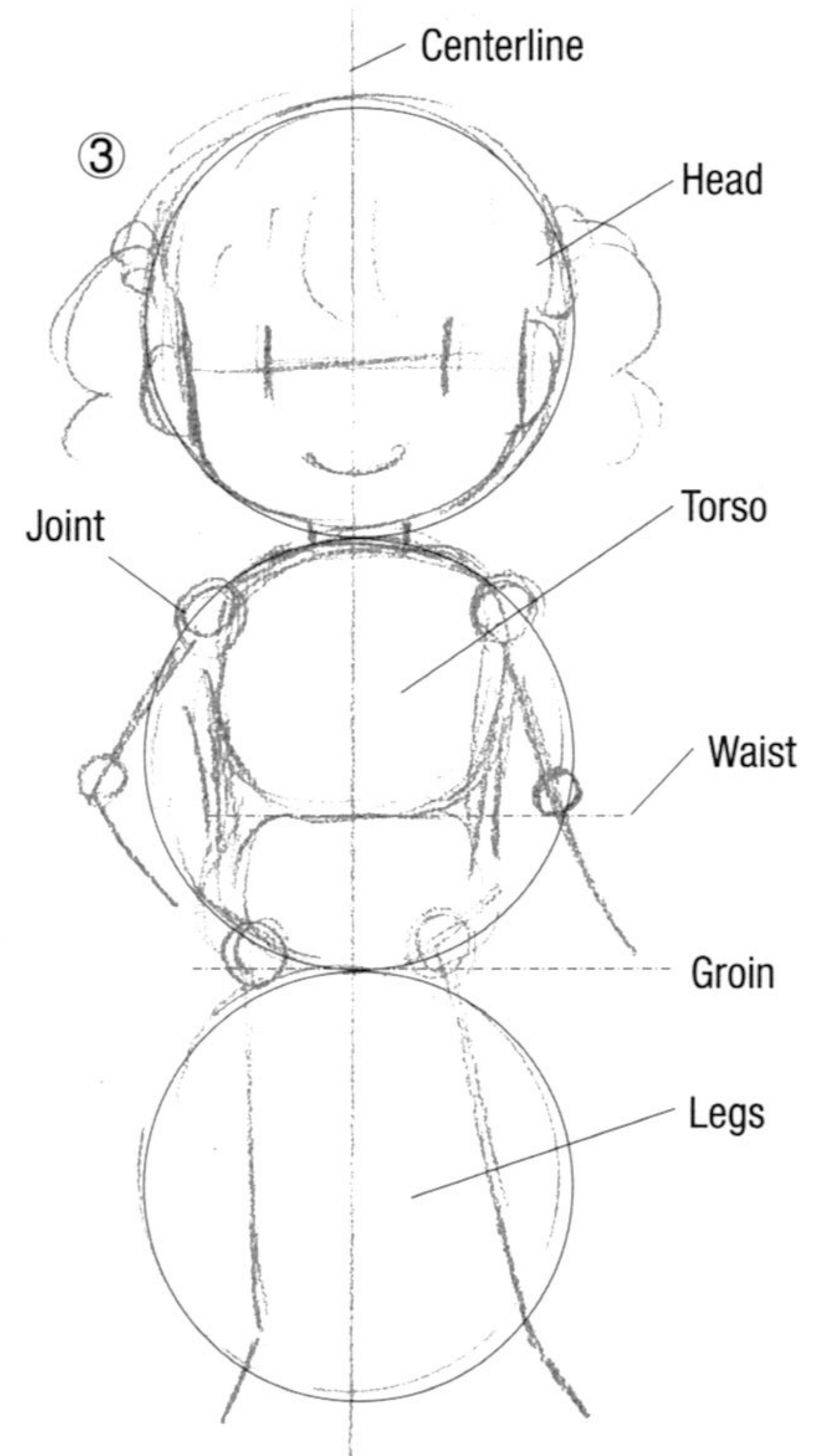
Draw a three-ball snowman.



Establish the positions of the waist and groin.



Draw the figure as if adding hands and feet to the original two-circle snowman.

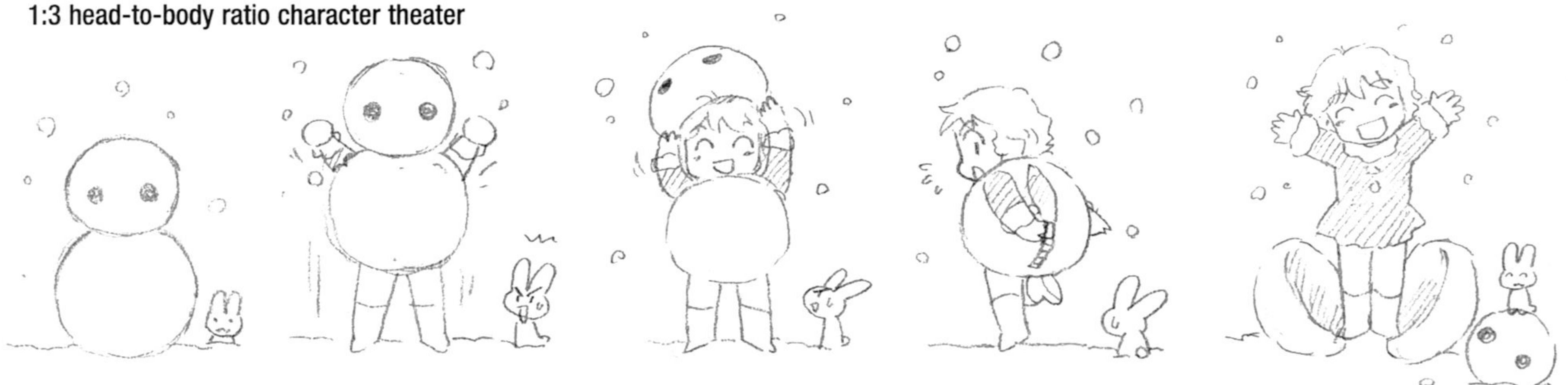


The above shows the completed body with its limbs.

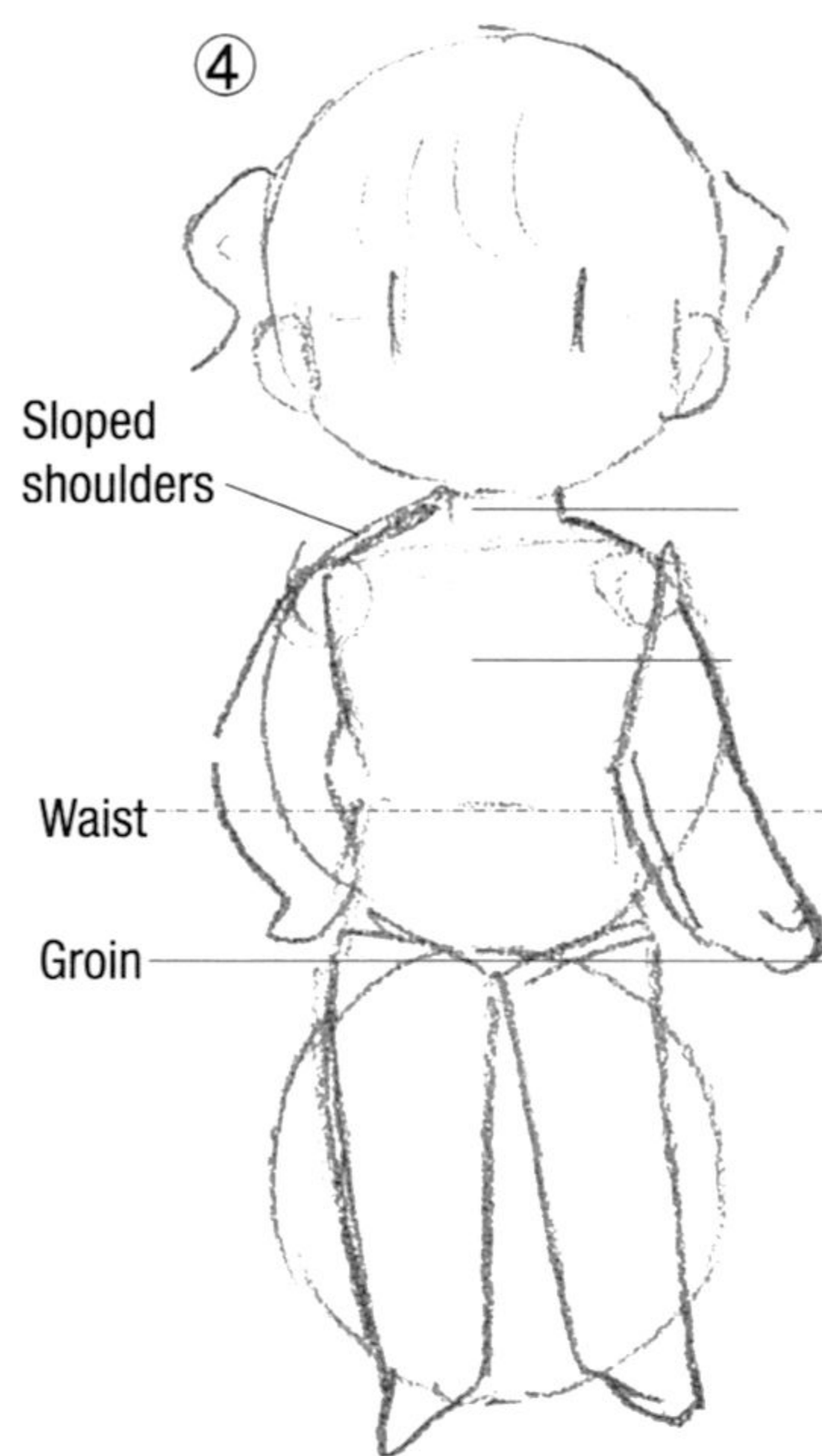


Original two-circle snowman superimposed over a 1:3 ratio character

1:3 head-to-body ratio character theater



Drawing a Girl



Create the impression of a girl by adding arms and legs to a torso that tapers slightly at the waist.



Sketch her costume's layout.



Clean up the contours to finish.

Drawing a Boy



Follow the same steps as when drawing a girl until determining the waist's position.



Sketch layouts for the torso, joints, and limbs. At this stage feel free to modify the direction the head faces.



Draw the hair, the arms, and the legs. Add the clothes.



Clean up the contours to finish.

Portraying the Hands of 1:3 Head-to-Body Ratio Characters

This section covers how to stylize the hands of a 1:3 head-to-body ratio character. The hands of these characters tend to have rounder contours and thicker digits than real hands.



Rock (Gripping)



Sample fist of an attractively proportioned character.
(Hands underneath those drawn within circles represent sample hands of attractively proportioned characters.)



Scissors



Paper (Open hand)



Lightly clenched hand



Hands covering the mouth



Hands carrying an object



Portraying the Feet of 1:3 Head-to-Body Ratio Characters

Contrasted with the Feet of 1:5 Head-to-Body Ratio Characters

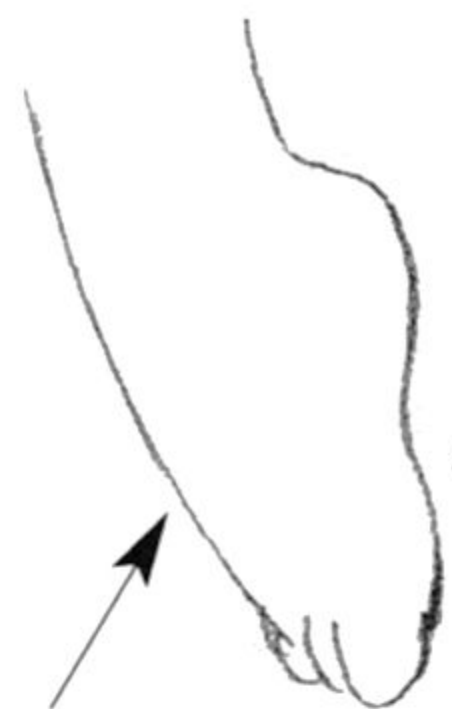
1:3 head-to-body ratio



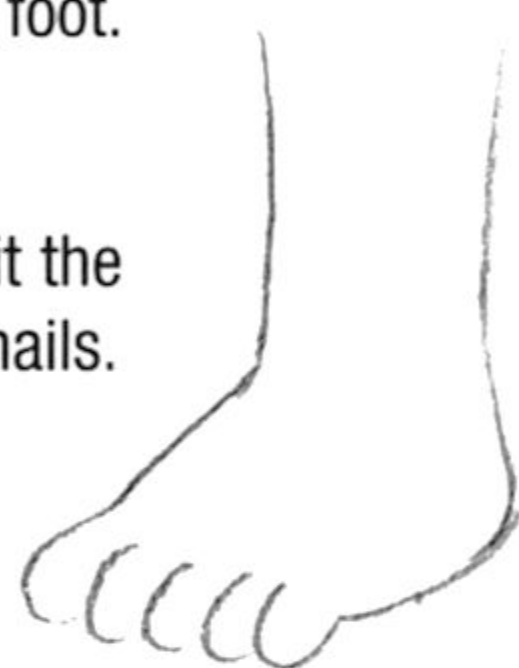
Use a clean, gently arcing line to define the top of the foot.

Omit the toenails.

Draw 1:3 head-to-body ratio characters with cute, stylized feet.



The sole's contour should not undulate dramatically.



The ankle should also be omitted.



The heel and arch of the foot are clearly visible on the 1:5 head-to-body ratio character.



Ankle

Realistically proportioned look appropriate on 1:5 head-to-body ratio characters.



1:5 head-to-body ratio



When giving the viewer a glimpse of the sole, exaggerate the foot's size.



Draw a simply rendered version of the foot's sole.



The foot should not taper at the ankle.

The foot should form a simple "V" shape.



The sole of the foot should reflect the angle and the direction of the kick.



The heel is exaggerated.

Ball of the foot



The ball of the foot should touch the ground.



Both feet should have essentially the same silhouette.

The legs are stocky and stylized, allowing view of only the tips of the toes. There is hardly any unevenness in the feet's contours.



The feet of the 1:5 character have complicated silhouettes that include the heel, the ankle, and the arch of the foot.



Inward curve at the ankle and then bulge of the bony joint are clearly visible on the 1:5 character's foot.

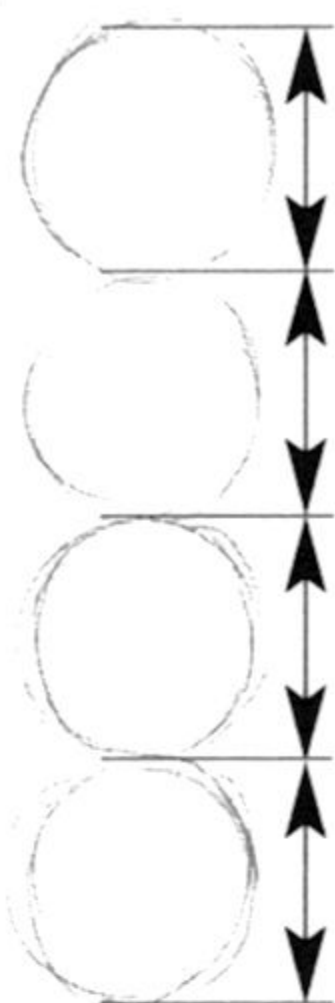
How the foot touches the ground dramatically affects the foot's shape.

Drawing a 1:4 Head-to-Body Ratio Character

Start by drawing four circles of the same size.

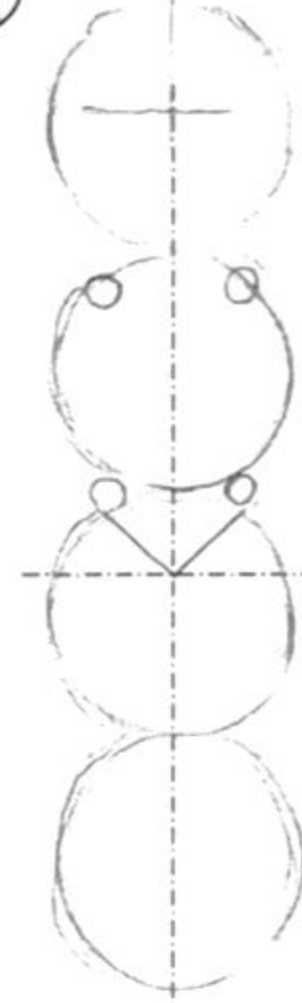


①



Stack four circles of the same size.

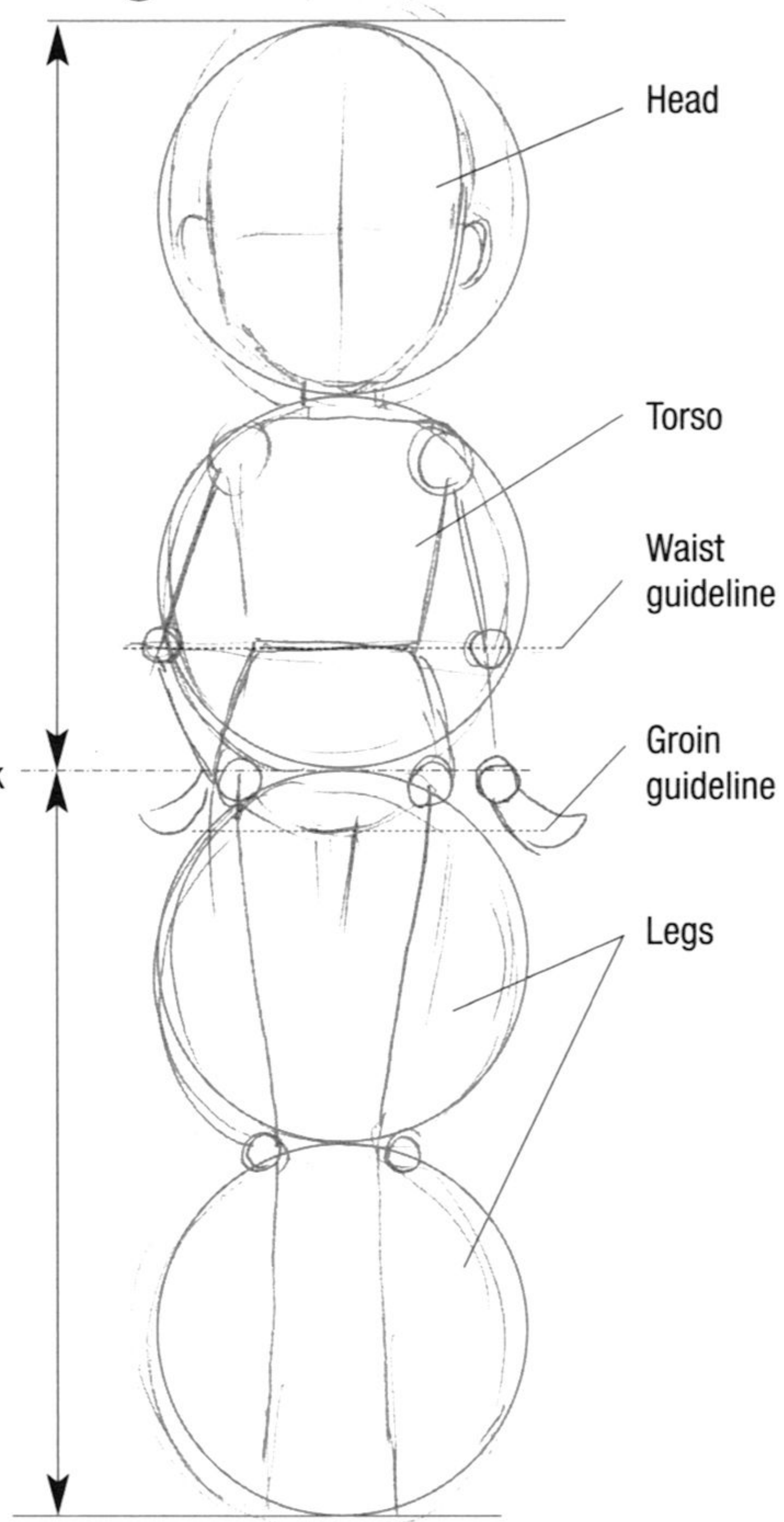
②



Groin

Draw an X for the face and circles for the joints. Plan to position the groin underneath the hip joints.

③



Head

Torso

Waist guideline

Groin guideline

Legs

Halfway mark

Completed layout of the torso and limbs



Second circle

Joint layout

Layouts for the joints may be drawn underneath the second circle. Adjust the groin's position while drawing the legs.

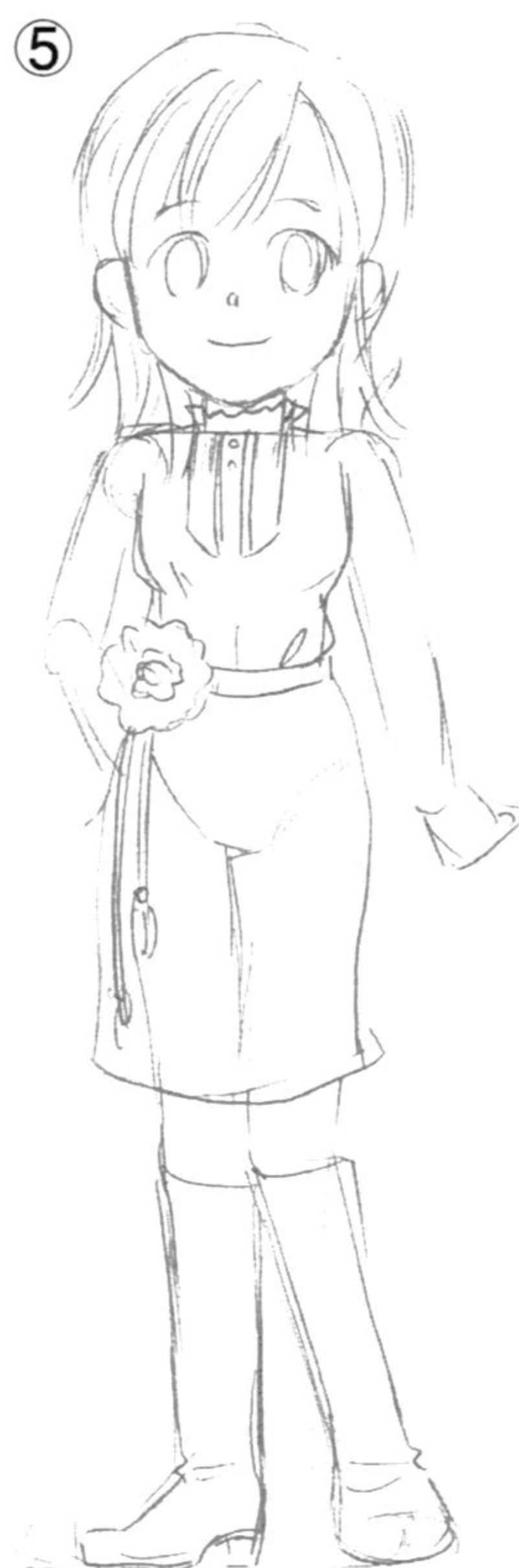
1:4 head-to-body ratio character theater



Drawing a Girl



Draw the arms and legs and add the face and hair.



Sketch the costume's layout.



Adjust the contours and add in the details to finish.

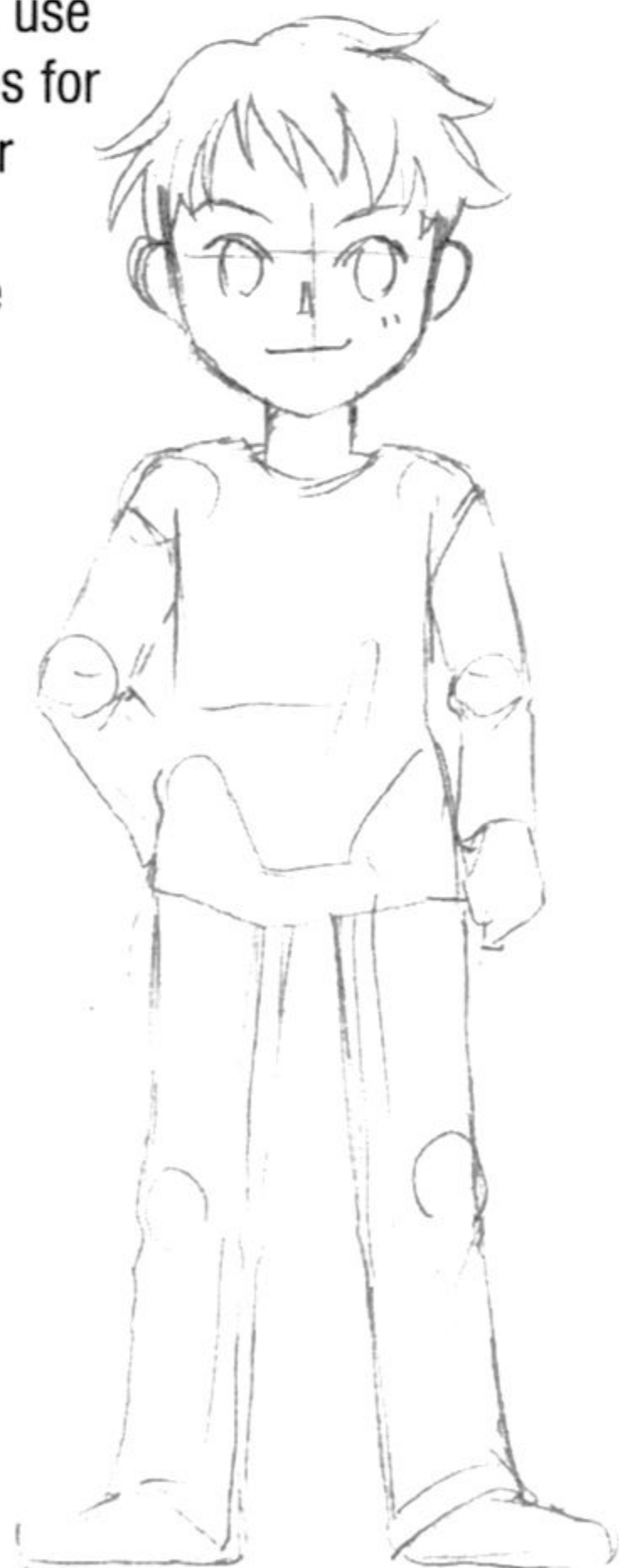


Ref. Fig.: Starting with the same layout but dressing the figure in different clothes and thickening the eyebrows produces a boy character.

Drawing a Boy



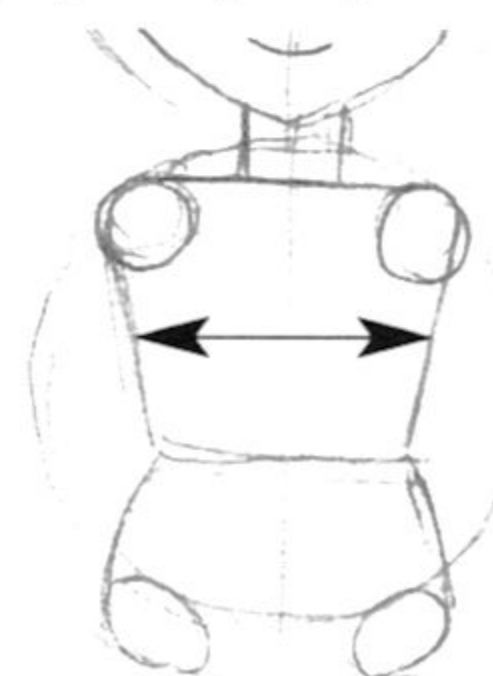
For the boy, use larger circles for the shoulder joints and broaden the shoulders.



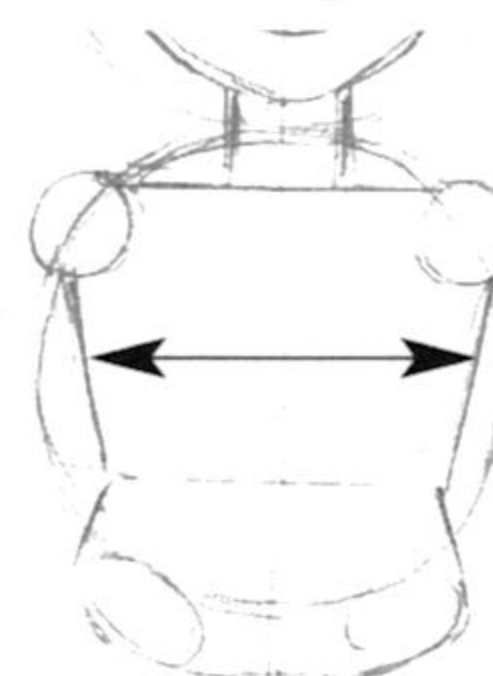
Even with thin eyebrows, the body build still makes the character appear masculine.



Differences in the eyebrows alone can distinguish the genders of 1:4 head-to-body ratio characters. Since the 1:4 ratio character's proportioning matches that of a skinny child in his preteens or younger, this head-to-body ratio is well suited to works of *manga* where gender is not physically emphasized and relatively androgynous characters.



Girls' torsos tend to be slimmer (narrower).



Boys' torsos tend to be broader.

These torso layouts indicate the changes that must be made to distinguish a male from a female character. A difference in gender may be indicated by differences in torso width.

The above shows a layout with muscular shoulders to evoke a strongly masculine appearance.

Portraying the Hands of 1:4 Head-to-Body Ratio Characters

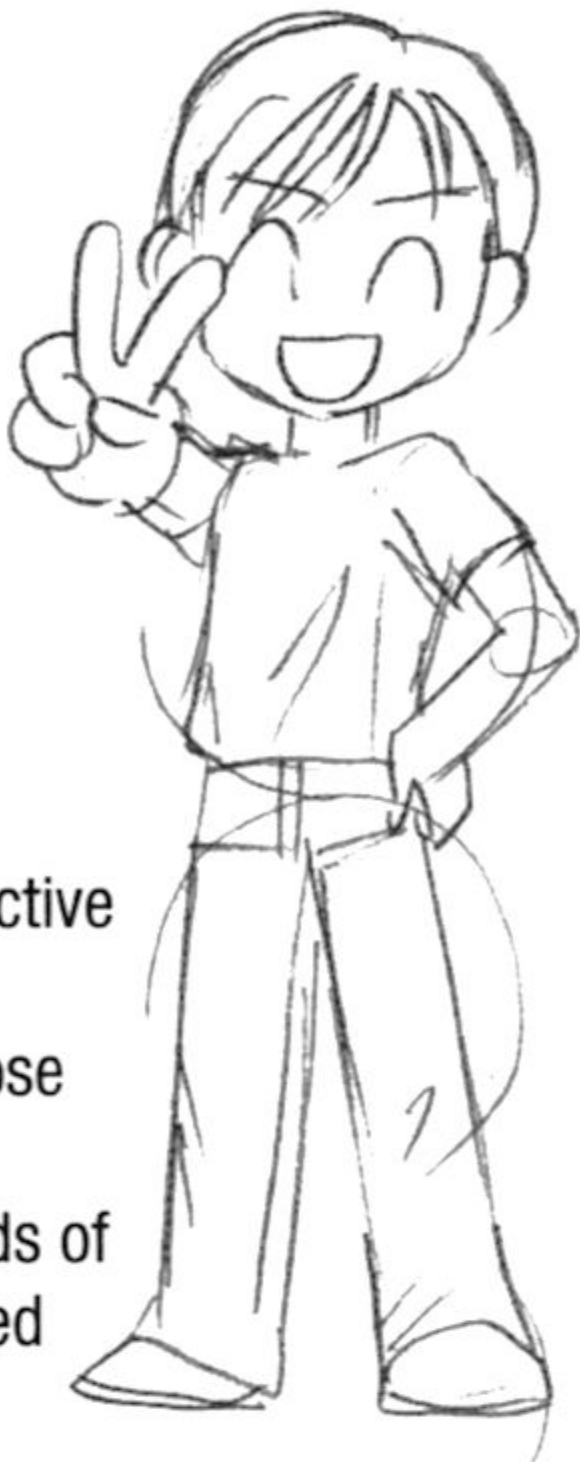
This section covers how to stylize the hands of a 1:4 head-to-body ratio character. While the length and proportioning of the fingers are relatively that of a real hand, the palm is relatively small. Use round forms for the joints and fingertips.



Rock (Gripping)



Sample fist of an attractive (tall) character (Hands underneath those drawn within circles represent sample hands of attractively proportioned characters.)



Scissors



Paper (Open hand)



Lightly clenched hand



Hands covering the mouth



Hands carrying an object



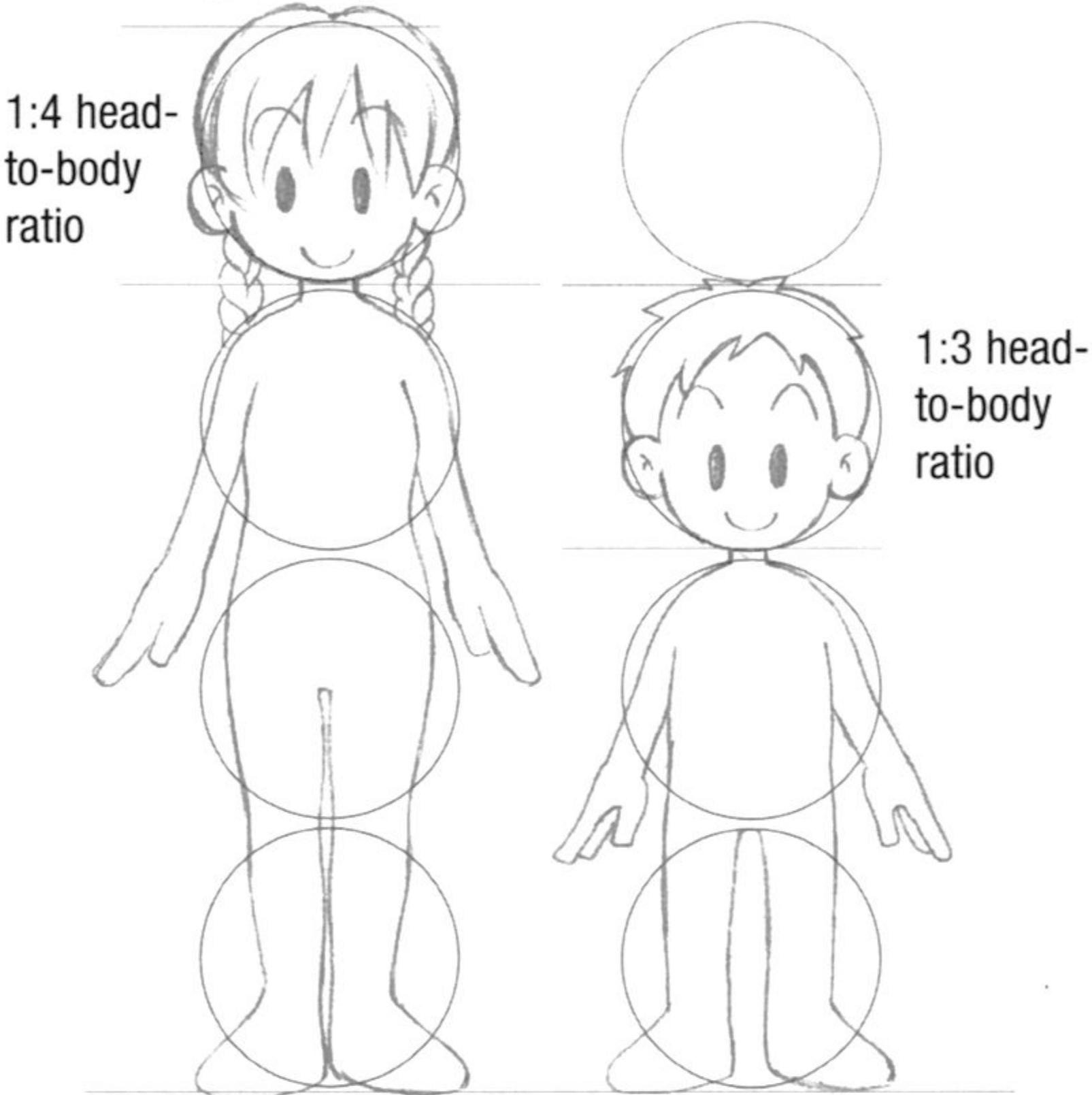
Tips in Head-to-Body Ratio Application

Different head-to-body ratios are often used to distinguish adult characters from child characters, as children and adults have different proportioning. Select the head-to-body ratio appropriate to the character.

Examples of Common Ways Proportion Distinguishes Characters: Parents and Children



Easy Methods of Application: Height Adjustment

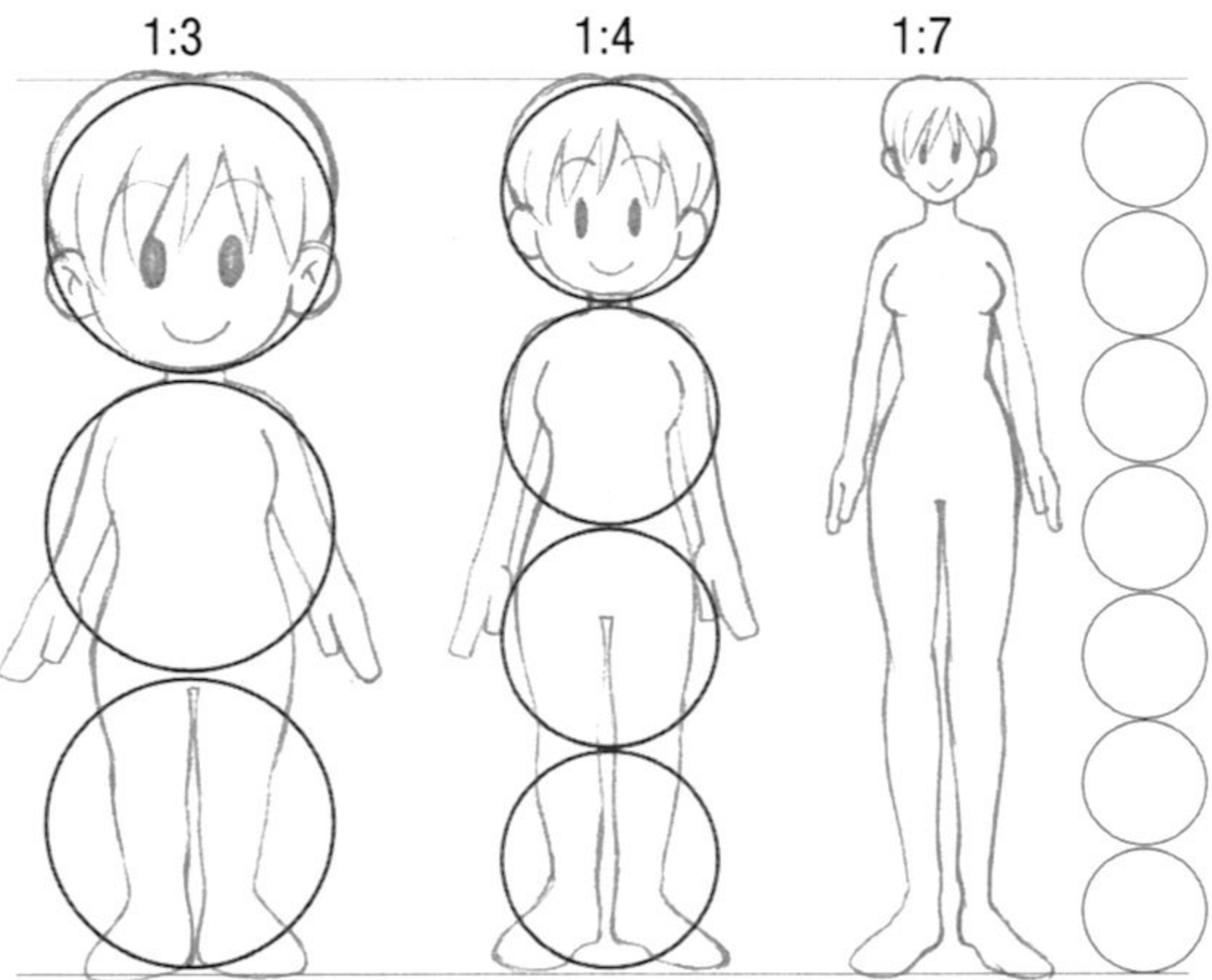


If both heads are drawn at the same size, a 1:4 head-to-body ratio character will be one head-length taller than a 1:3 character. The same applies to characters of taller head-to-body ratios as well.

Older sister; 1:4 head-to-body ratio; junior high school student Younger brother; 1:3 head-to-body ratio; elementary school student Mother; 1:6~1:7 head-to-body ratio (1:6.5); homemaker

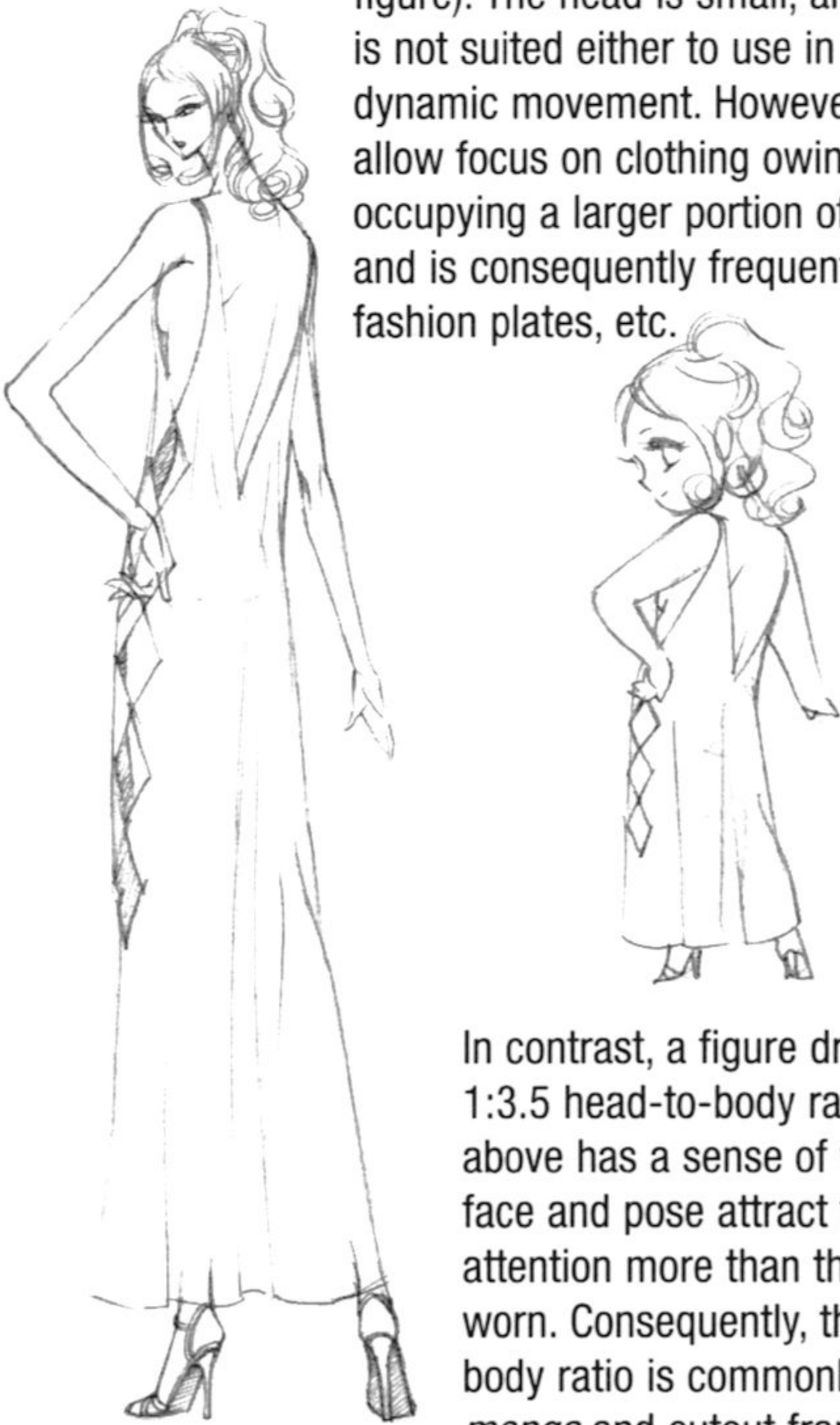
The head-to-body ratio selected depends on the artist's preferences. A 1:4 head-to-body ratio character might become an elementary school student, while a 1:5 ratio character might be a junior high schooler. Design your characters so the viewer will be able to distinguish between them at a glance.

"Head-to-body ratio" refers to the use of the head as a unit of measurement to determine the figure's full height.



If the heights are kept the same, then the "taller" the character's head-to-body ratio, the smaller the head becomes.

The figure seen to the left is drawn at a 1:12 head-to-body ratio (a fashion plate figure). The head is small, and the figure is not suited either to use in *manga* or dynamic movement. However, it does allow focus on clothing owing to the body occupying a larger portion of the figure and is consequently frequently used for fashion plates, etc.



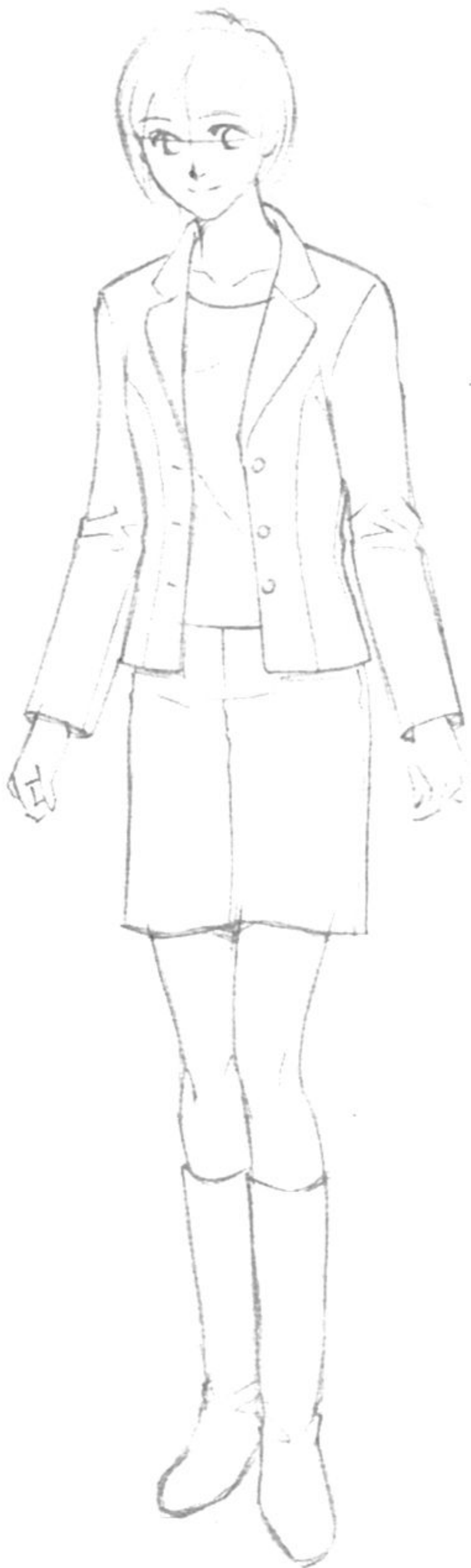
In contrast, a figure drawn at a 1:3.5 head-to-body ratio as seen above has a sense of vibrancy. The face and pose attract the viewer's attention more than the costume worn. Consequently, this head-to-body ratio is commonly used in *manga* and cutout frames.

Drawing the Clothes

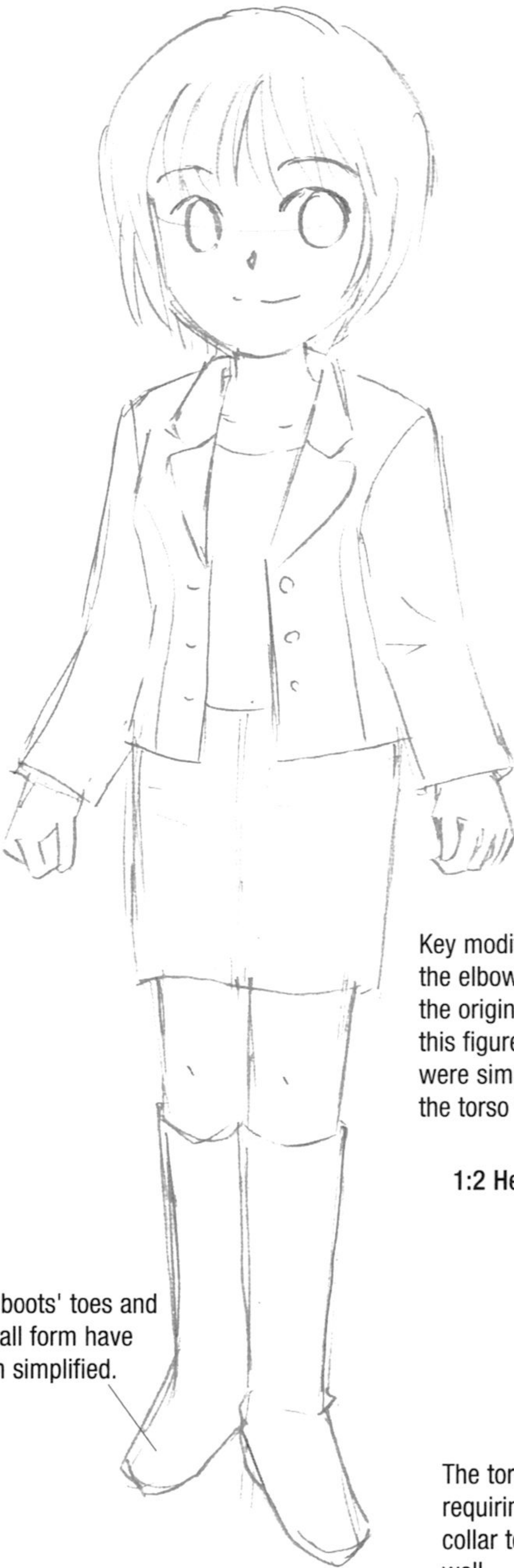
This section covers how to sketch a *chibi* character, using an attractively proportioned character as the point of departure. The less the number of head-lengths comprising the full height, the greater the degree of simplification and abstraction.

Jacket and Miniskirt

1:8 Head-to-Body Ratio



1:4 Head-to-Body Ratio



The boots' toes and overall form have been simplified.

The jacket's open front constitutes a key design point on the character drawn at a 1:8 head-to-body ratio seen to the left. Consequently, the appearance of the figure underneath the clothing must first be established, using a nude sketch.

1:3 Head-to-Body Ratio

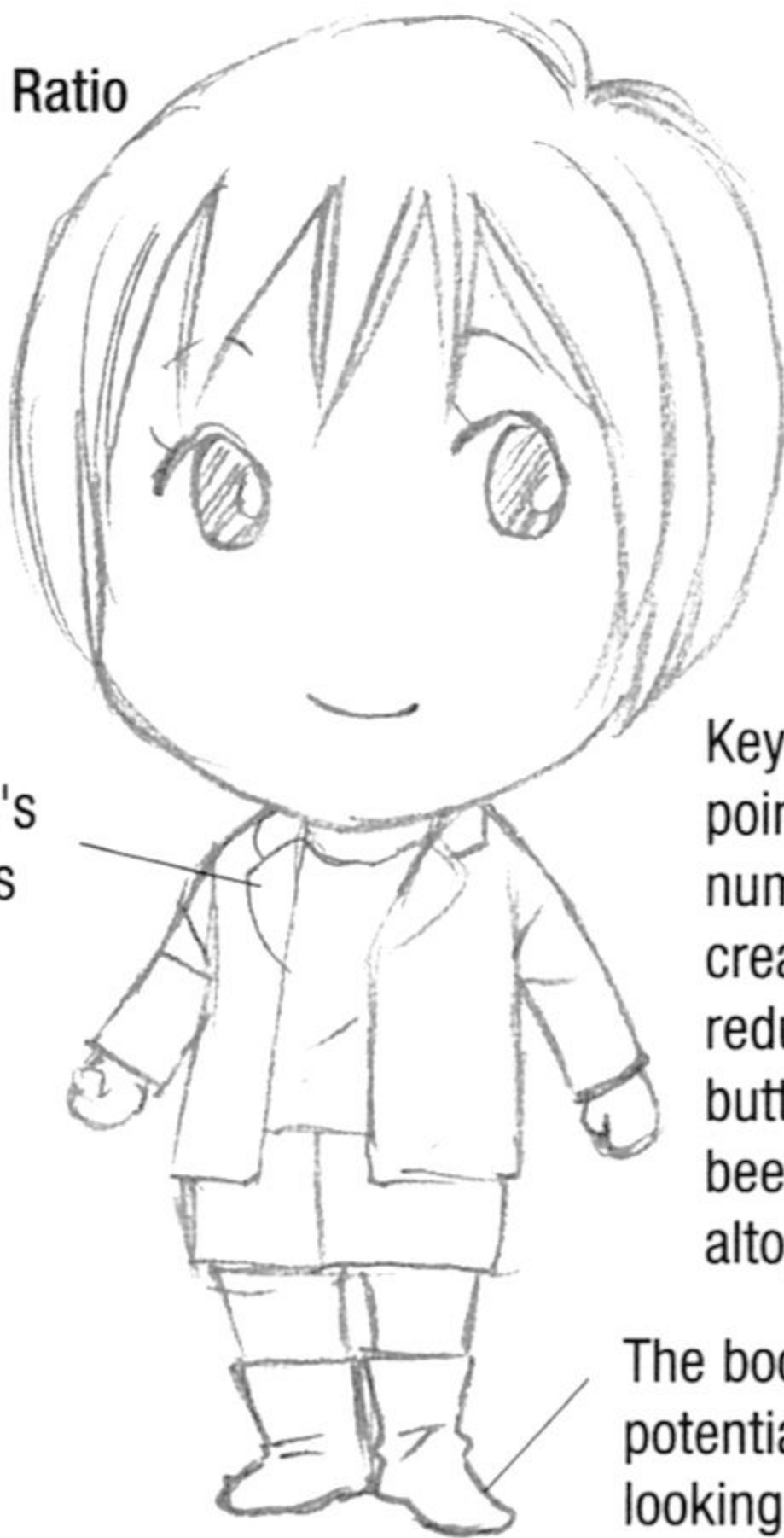


Key modification points: The creases seen on this figure have been simplified and the number of buttons, reduced compared to the original character.

The boots' toes taper in a more simplified form than the original.

Key modification points: Creases at the elbows and the ankles seen in the original were omitted to create this figure. The arms' silhouettes were simplified, and creases on the torso were also left off.

1:2 Head-to-Body Ratio



The torso is small, requiring the jacket's collar to be small as well.

Key modification points: The number of creases has been reduced, and the buttons have been omitted altogether.

The boots could potentially end up looking like tall galoshes, so ensure that the toes are pointy.

1:4 Head-to-Body Ratio



When sketching the figure layout, be certain to establish the positions of the chest, the waist and the groin, and the elbow and knee joints.



Sketch layouts of the face and clothes.

1:3 Head-to-Body Ratio



Draw the body's layout. At this point you should also sketch layouts of the 1:3 head-to-body ratio character's distinctive arms and legs.



Draw the boots over the legs' layouts.

Use the knees as a guide when drawing the skirt's hem.

1:2 Head-to-Body Ratio



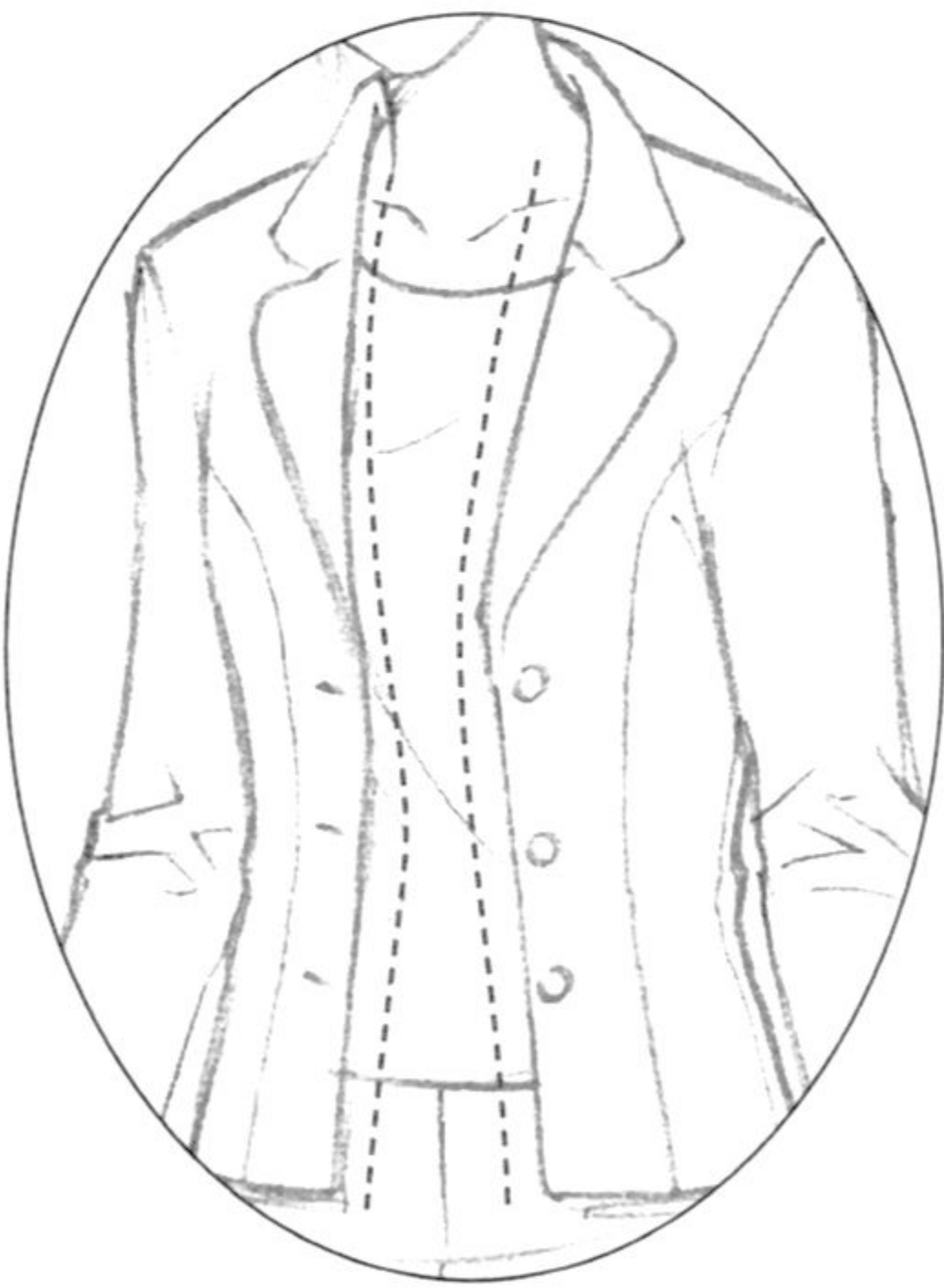
Body layout



Sketch the figure in a pose while adjusting the layout.



Add the clothes.



The above shows the front of the jacket of the original attractive character. Simple straight lines and curves were used to reproduce the jacket front on the *chibi*.

1:8 Head-to-Body Ratio



1:4 Head-to-Body Ratio

Key modification point: The holes in the belt have been omitted.



The shorter torso means that the side of her tummy is no longer visible. Her purse was enlarged to turn it into a visual accent.



The long legs of the 1:8 head-to-body ratio make the character difficult to balance visually without sketching the entire figure, including those parts obscured in the final image.

1:3 Head-to-Body Ratio



Key modification points: The holes in the belt have been enlarged, while the number of holes has been reduced. The kerchief knot at the back of her head has been enlarged, and the purse's size has been stylistically adjusted (i.e. shrunken) to match the *chibi* character.

1:2 Head-to-Body Ratio



Key modification points: The holes in the belt have been eliminated. Note that modifying the character's build affects how the body frames the purse.

1:4 Head-to-Body Ratio



Use circles to denote the joints' layouts while sketching the body's contours.



Clearly define the foot's sole.



Last, add the lace-up sandal's cords and details on the shorts.

Even though the circles used for the initial layout were sketched roughly, the end result was still an accurately proportioned 1:4 character. Sketching a character does not mean drafting. There is no need to draw perfect circles for the layout.

1:3 Head-to-Body Ratio



Establish in which directions the head and the body face when drawing the contour layout and sketch the arms and legs using rough contours.



Adjust the contours and sketch the purse's layout.

1:2 Head-to-Body Ratio



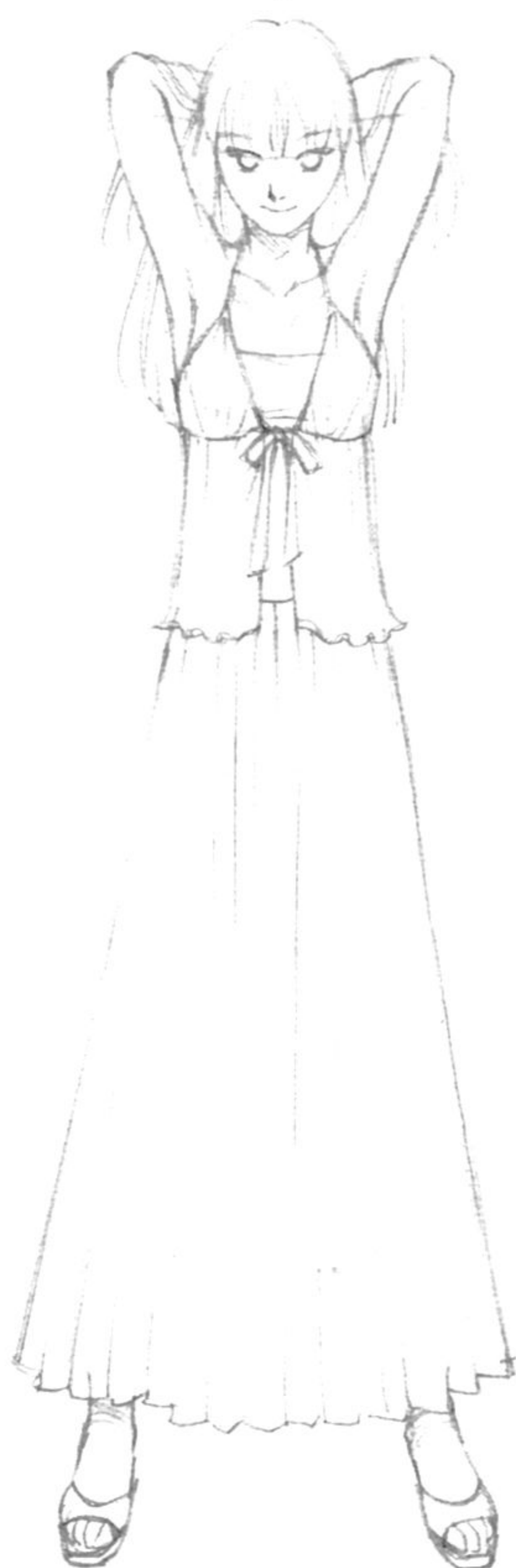
Joint layouts

Use a rectangle for the torso when sketching the contour layout.



Match the purse stylistically to the figure's proportioning. The sandals' heels cause the character to gain a certain degree of height.

1:7.5 Head-to-Body Ratio



1:4 Head-to-Body Ratio



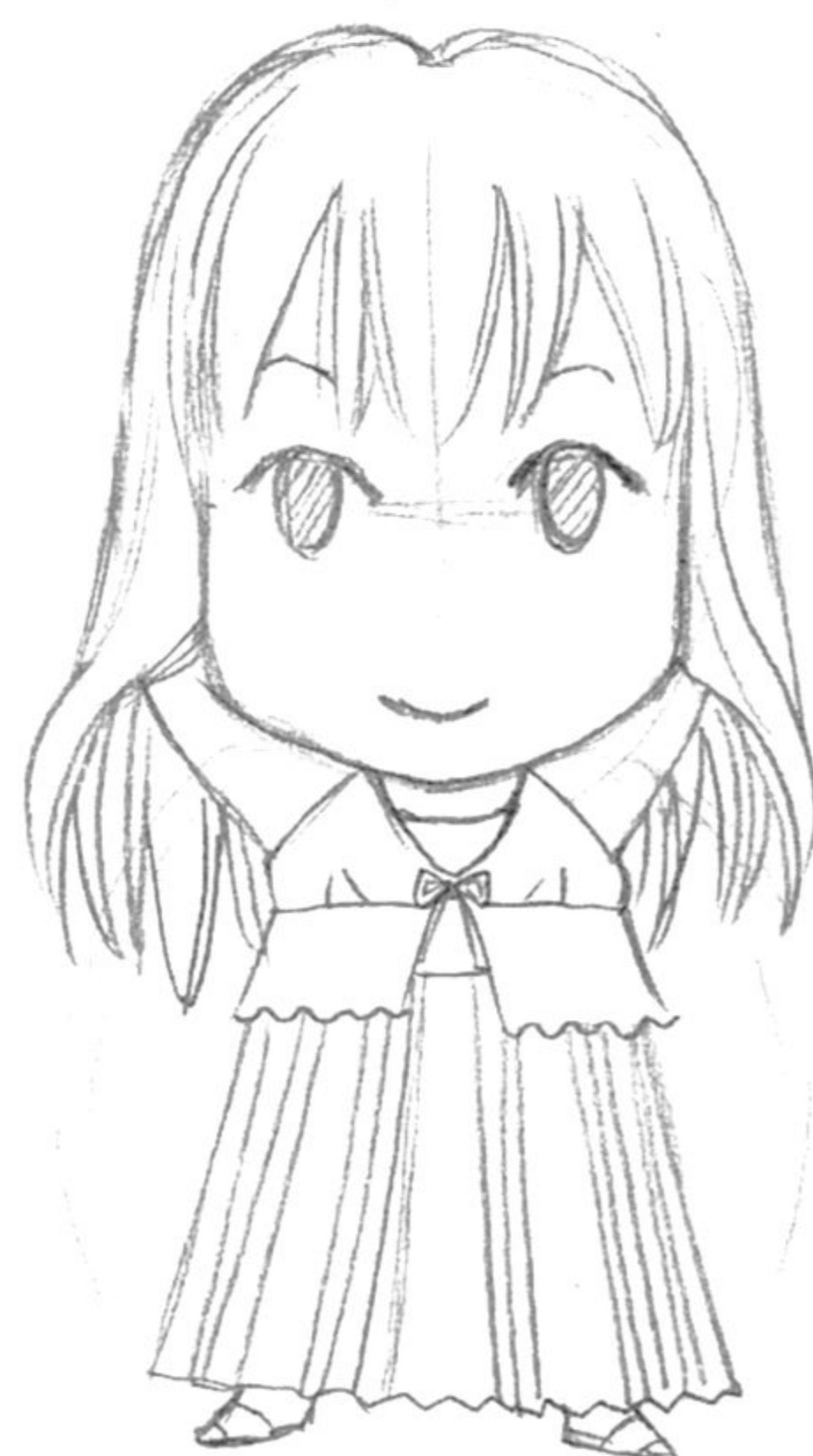
Key modification point: The shorter torso accentuates the figure's triangular silhouette.

1:3 Head-to-Body Ratio



Key modification points: The bow has changed positions. The proportionally larger bow heightens the character's sweet and adorable appearance.

1:2 Head-to-Body Ratio



Key modification points: The bow on her chest has been made smaller, while the skirt's pleats have been accentuated. The way her hair hangs has been adjusted to suit her shorter arms.

Long skirts have the tendency to make the torso look long, so the head-to-body ratio was dropped from 1:8 to 1:7.5 to shorten the torso. The clothing covers a tremendous portion of the figure, making an accurate preliminary nude sketch vital.

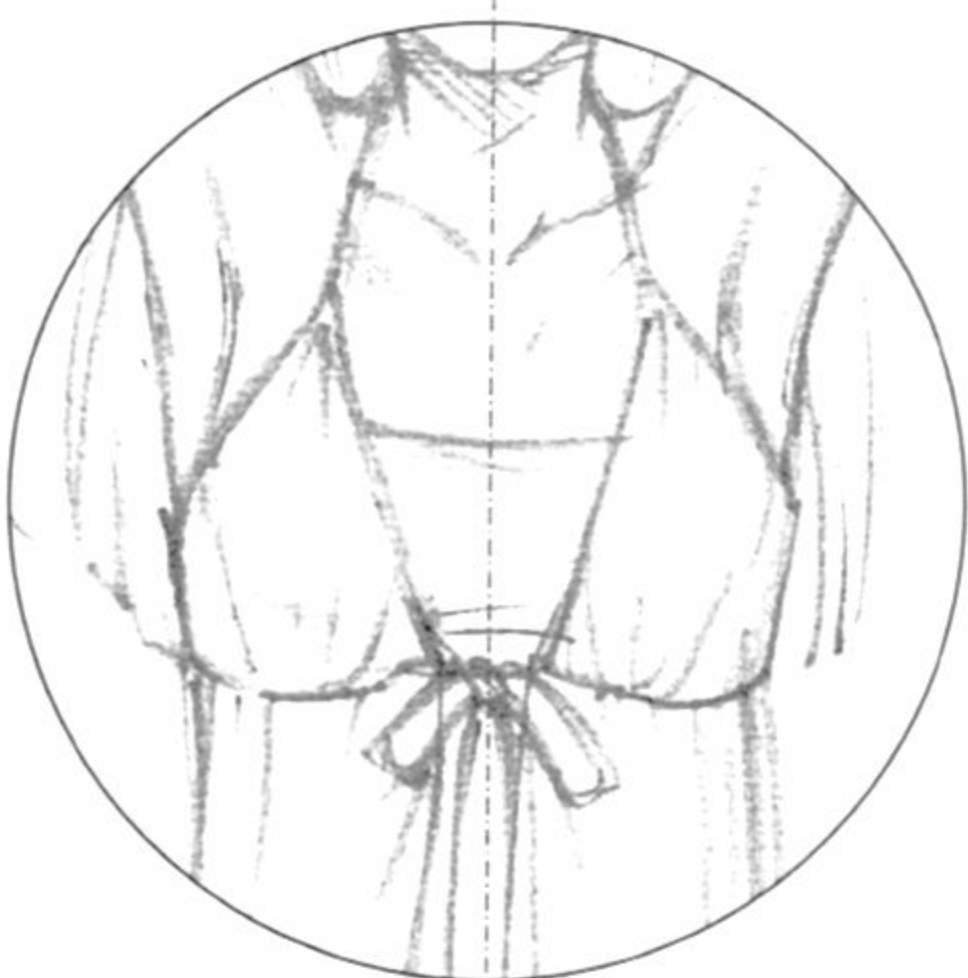
1:4 Head-to-Body Ratio



Draw the figure in its entirety when sketching the contour layout.



Draw knee and ankle guidelines in order to determine where to position the skirt's hem.

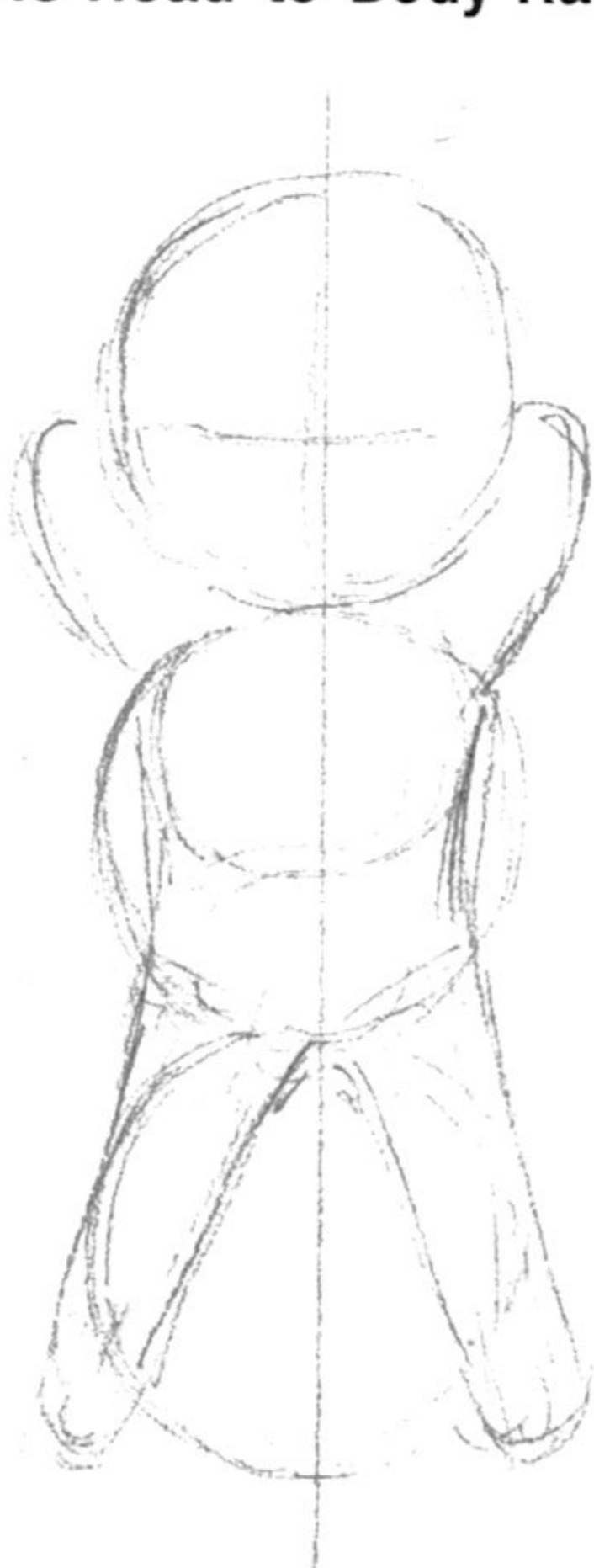


The bow is centered on the torso below the chest. It is important that the preliminary sketch clearly indicate where the body's various parts are located.

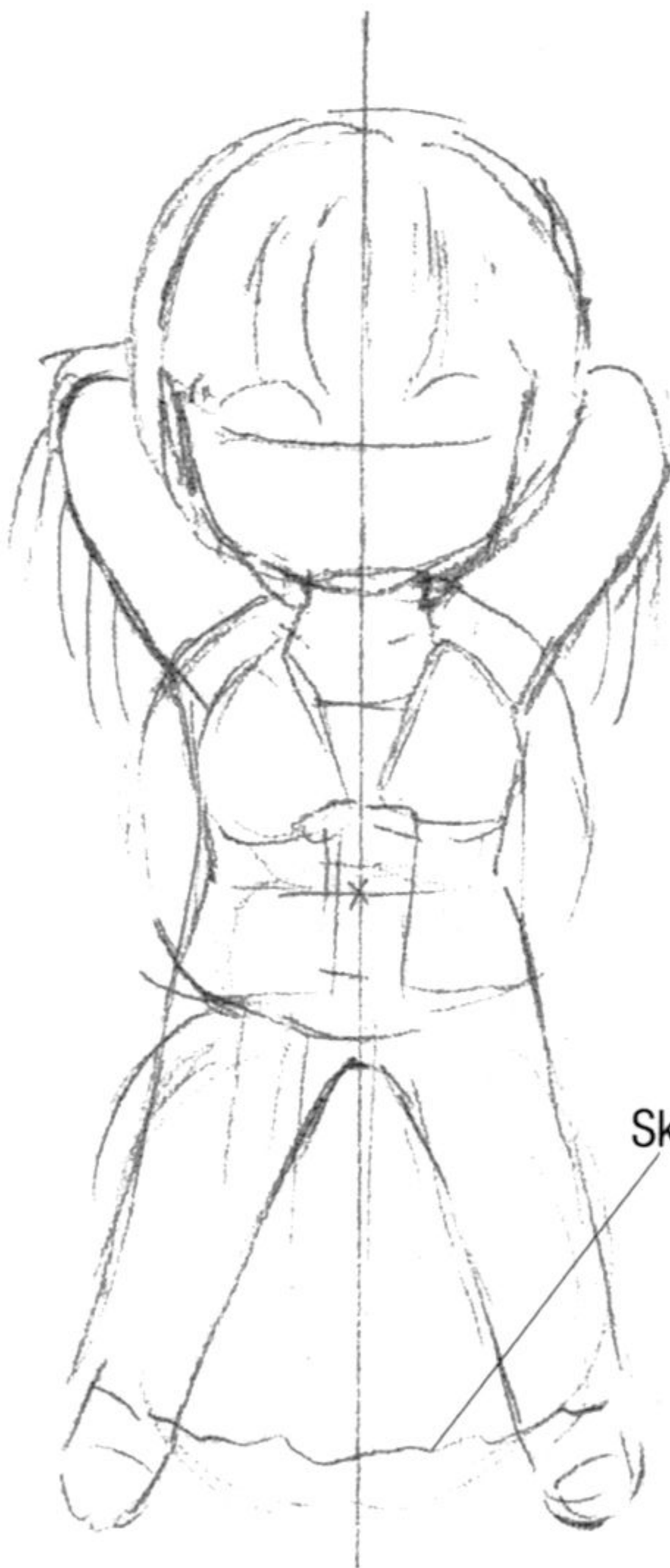


The hem falls to around the ankle.

1:3 Head-to-Body Ratio

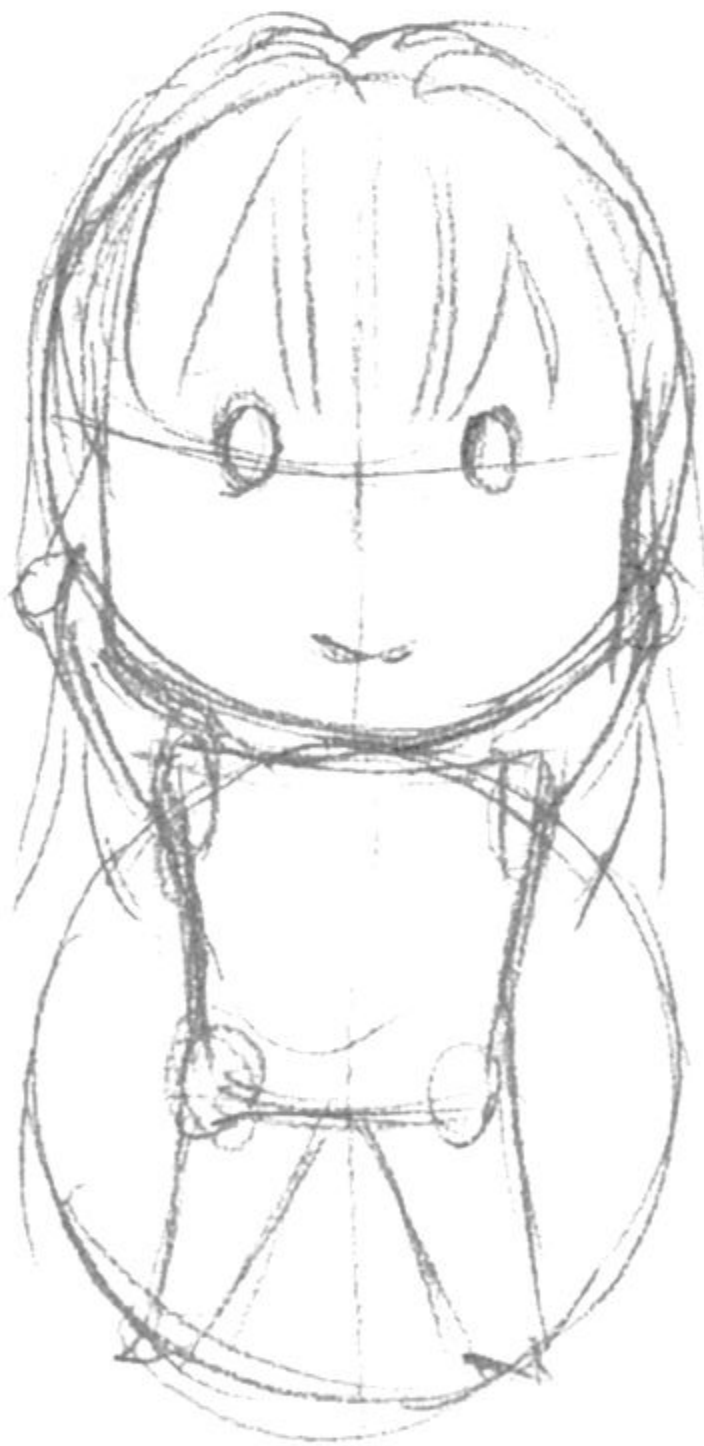


As this figure is composed from a front view, a clearly defined centerline (axial line) should be added at the contour layout stage.



The above figure includes layouts of the hair and clothing. Establish where the skirt hem's position at this stage.

1:2 Head-to-Body Ratio



The 1:2 character's proportionally shortened arms are physically incapable of being clasped behind her head. Thus, the figure's pose should be adjusted as seen above.



The hair has been modified to make it fall over the arms.

1:8 Head-to-Body Ratio



1:4 Head-to-Body Ratio



Key modification points: The bunched creases at the bent elbow have been reduced, and the trousers' exterior contours have been straightened. The proportionally larger feet give the figure visual stability.

Tapering the trousers' legs on this 1:8 head-to-body ratio character makes the legs appear long, even though the groin is positioned at the standard halfway mark.

1:3 Head-to-Body Ratio



Key modification points: The necktie has been widened, while the number of jacket buttons have been reduced. Raising the waist creates the appearance of long legs, retaining a sense of the original character's handsome build.

1:2 Head-to-Body Ratio



Key modification points: Bunching at the elbow has been omitted, while the creases at the jacket's side have been simplified and exaggerated. The buttons have been eliminated entirely. Simplifying and emphasizing the jacket's open front set the pose.

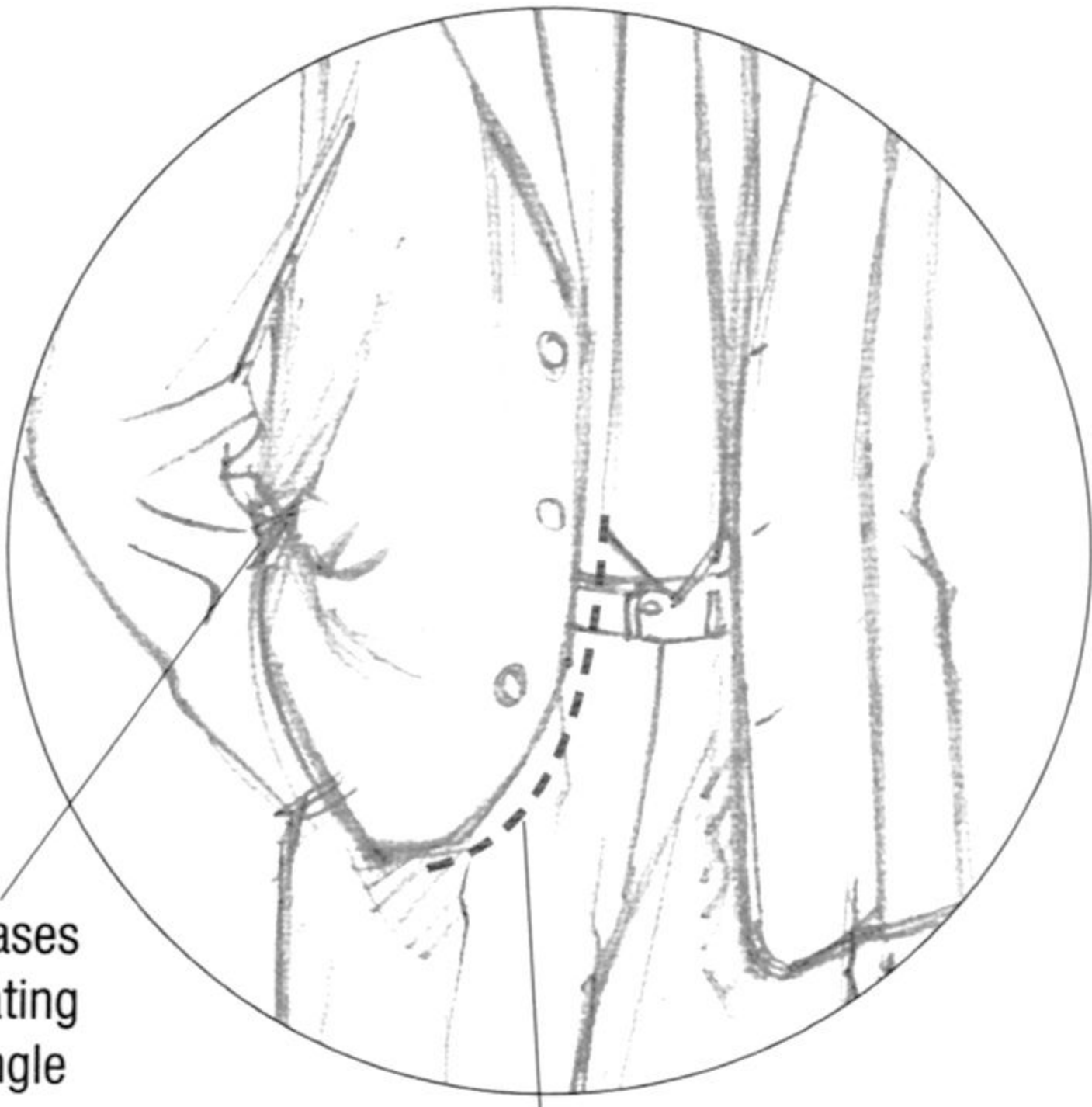
1:4 Head-to-Body Ratio



Waist guideline

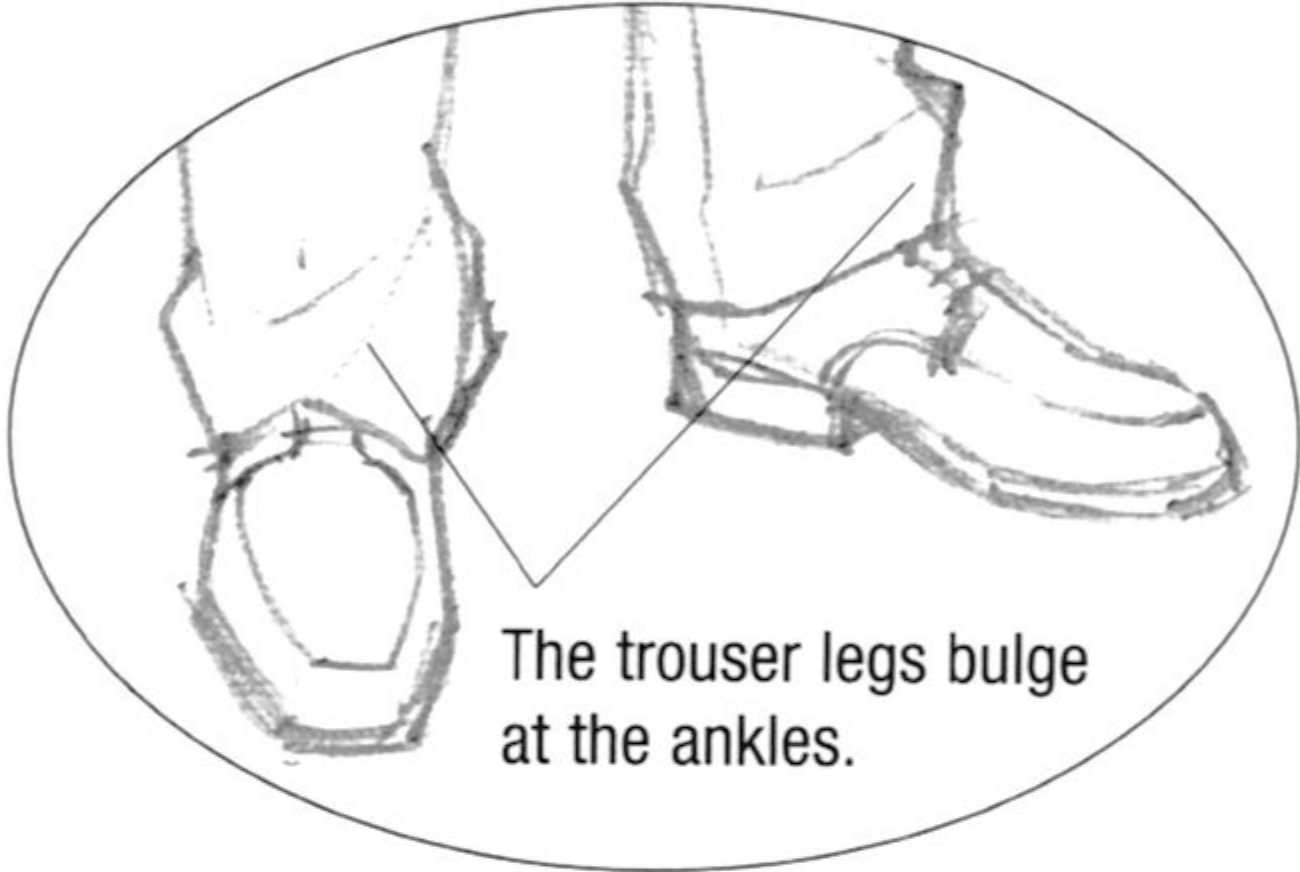


Draw the belt along the waist guideline and add the costume's contours.



Draw creases as if radiating from a single point.

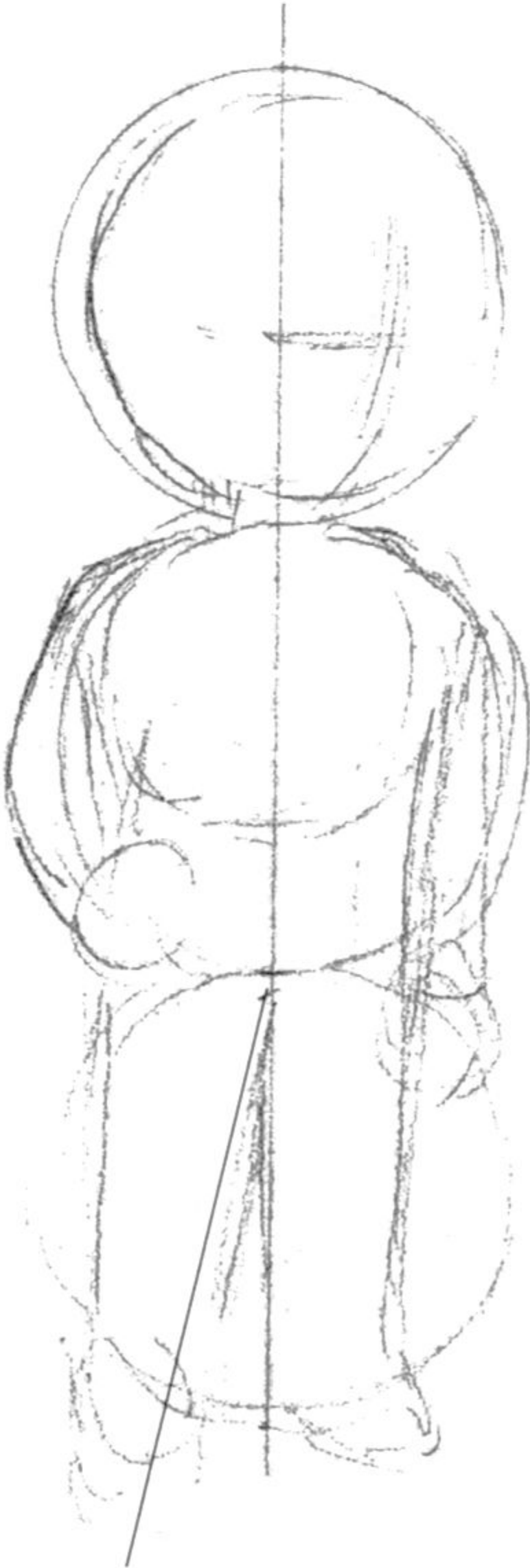
Use a curved contour to draw the corner of the open jacket rolling up in the distinctive manner illustrated.



The trouser legs bulge at the ankles.

Using the four-circle layout as a guide, give the figure's silhouette form.

1:3 Head-to-Body Ratio



Draw a centerline bisecting the groin.



Draw the clothing. Any ripples or crinkles occurring around the trouser cuffs should be drawn at this point.

1:2 Head-to-Body Ratio



The hand crammed in the pocket constitutes a key composition point. Show the elbow jutting out from the layout stage.



Draw the bottom of the jacket, using the hand shoved in the pocket as a guide.

1:7.5 Head-to-Body Ratio



Jeans and casual jacket

1:4 Head-to-Body Ratio



Key modification points: The collar and epaulets have been enlarged. Since the posture is now held more erect than the original, the foot stepping forward has been made larger to emphasize the act of walking.

The selection of a 1:7.5 over a 1:8 head-to-body ratio results in a character that appears more convincingly like a youth than a young man in a suit.

1:3 Head-to-Body Ratio



Key modification points: To recreate this 1:3 version, enlarge the collar and the epaulets to exaggerate them, and simplify the show laces, the rip at the knee, the bandage on the cheek, the goggles, and other identifying details.

1:2 Head-to-Body Ratio



Key modification points: Modifying the character's actual build results in his gait being transformed from a brisk walk to a self-assured stride.

1:4 Head-to-Body Ratio



Use the X across the face as a guide when drawing the goggles.



Exaggerate distinguishing features, such as the collar and epaulets.

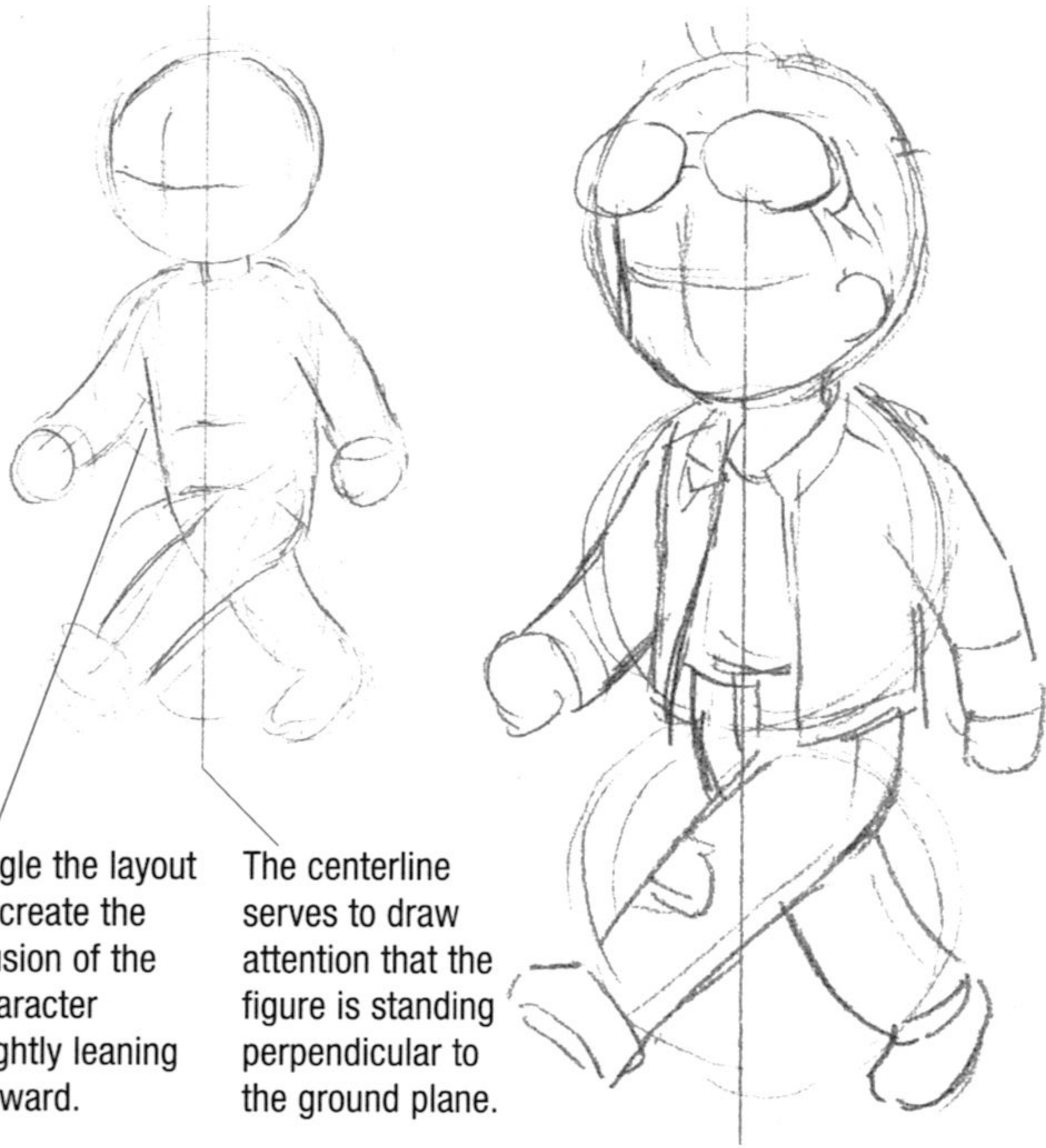


The less the number of head-lengths used for the character's height, the more complicated details, such as the soles of the shoes or their laces, should be either simplified or omitted.

When drawing a contour layout of a character in motion, sketch a manikin-style layout, indicating the joints' locations and then adjust the pose.

In response to the modified posture, show more of the sole of the shoe for added emphasis.

1:3 Head-to-Body Ratio



Angle the layout to create the illusion of the character slightly leaning forward.

The centerline serves to draw attention that the figure is standing perpendicular to the ground plane.

After having roughly sketched in identifying features, such as the collar, the goggles, the rip at the knee, etc., continue to develop the composition.

1:2 Head-to-Body Ratio



At this body size, the collar, epaulets, and other identifying features are difficult to exaggerate proportionally, so emphasize the act of walking instead.

No changes have been made to the goggles and clothing's design.

Portraying Shoes

Stylize and abstract the shoes to match the sketch character's foot shape. The less the number of head-lengths used to draw the character, the more details should be left out.

School Penny Loafers

1:4 Head-to-Body Ratio 1:3 Head-to-Body Ratio 1:2 Head-to-Body Ratio



Penny loafers worn by a 1:4 character



Penny loafers worn by an attractive, "tall" character

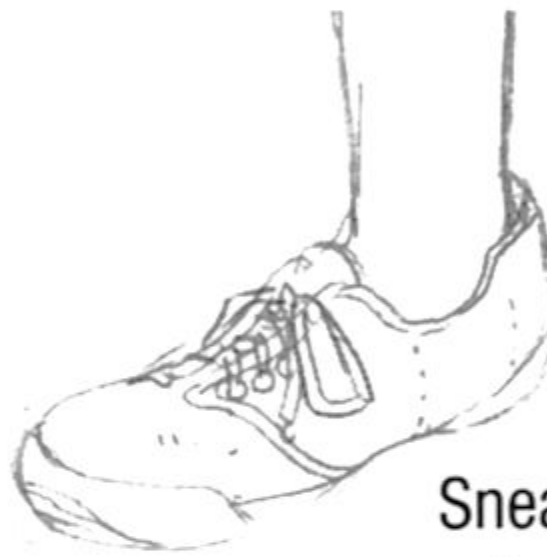


Penny loafers worn by a 1:3 character



Penny loafers worn by a 1:2 character

Sneakers



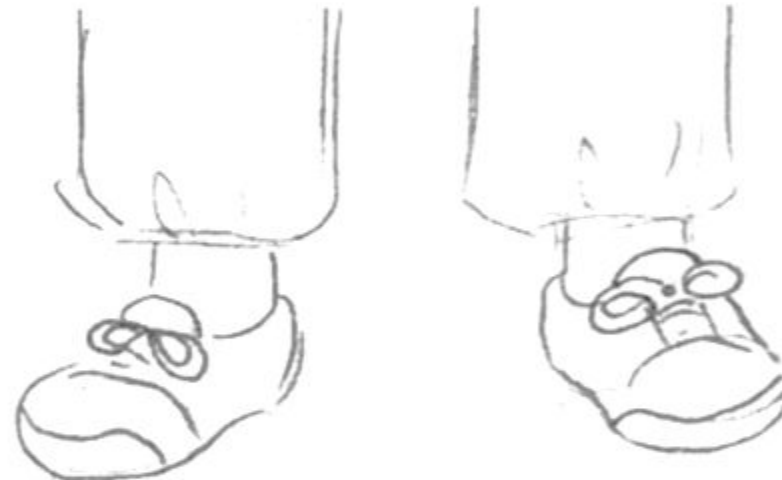
Sneakers worn by a 1:4 character



Sneakers worn by an attractive, "tall" character

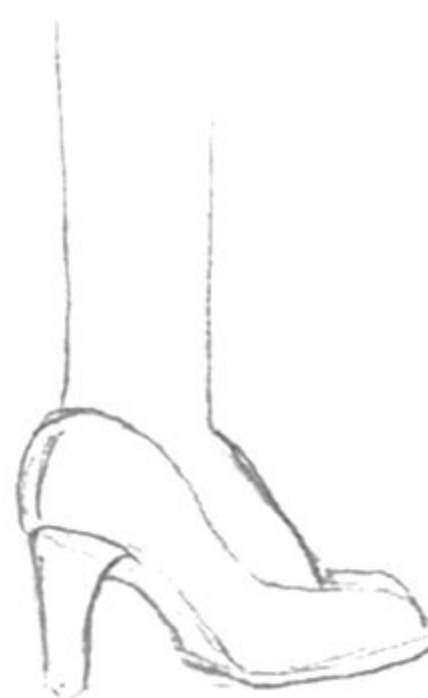


Sneakers worn by a 1:3 character



Sneakers worn by a 1:2 character

High-heeled pumps



Pumps worn by a 1:4 character



Pumps worn by an attractive, "tall" character



Pumps worn by a 1:3 character



Pumps worn by a 1:2 character

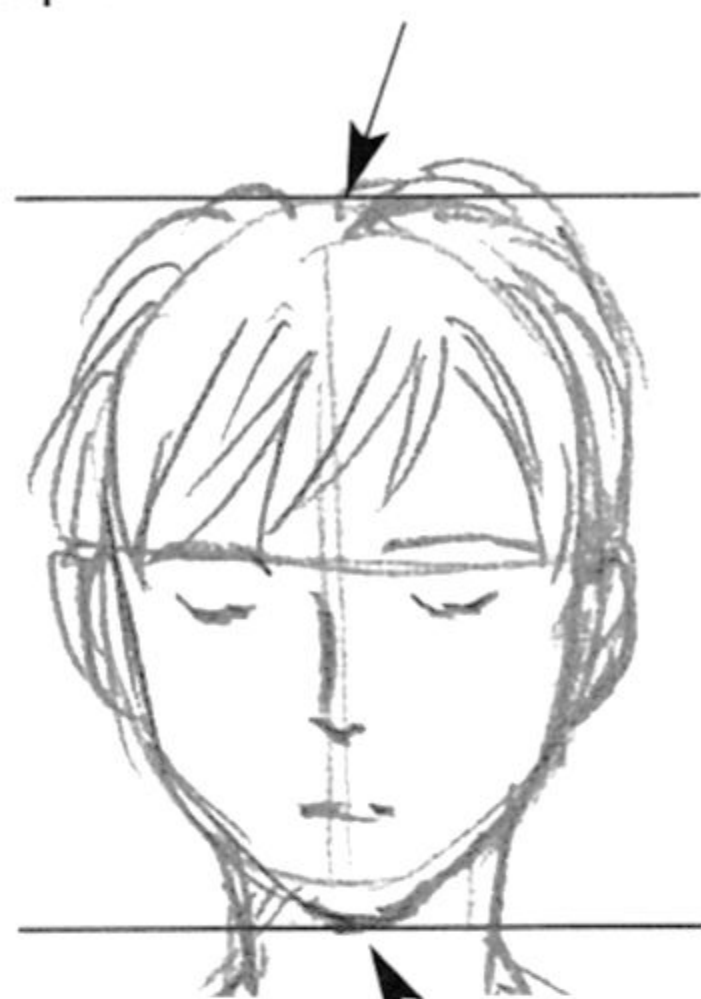
Selecting the Head-to-Body Ratio

Artists accustomed to drawing characters unconsciously and consistently use head-to-body ratios of their preference. Make an effort to discover which head-to-body ratios suit your own tastes.



Using the head's length as a unit of measurement, measure the height of a character of your preference standing.

The hair adds extra height to the head, so be sure to draw a horizontal guideline touching the top of the head minus the hair.



Draw a guideline at the bottommost point of the jaw.

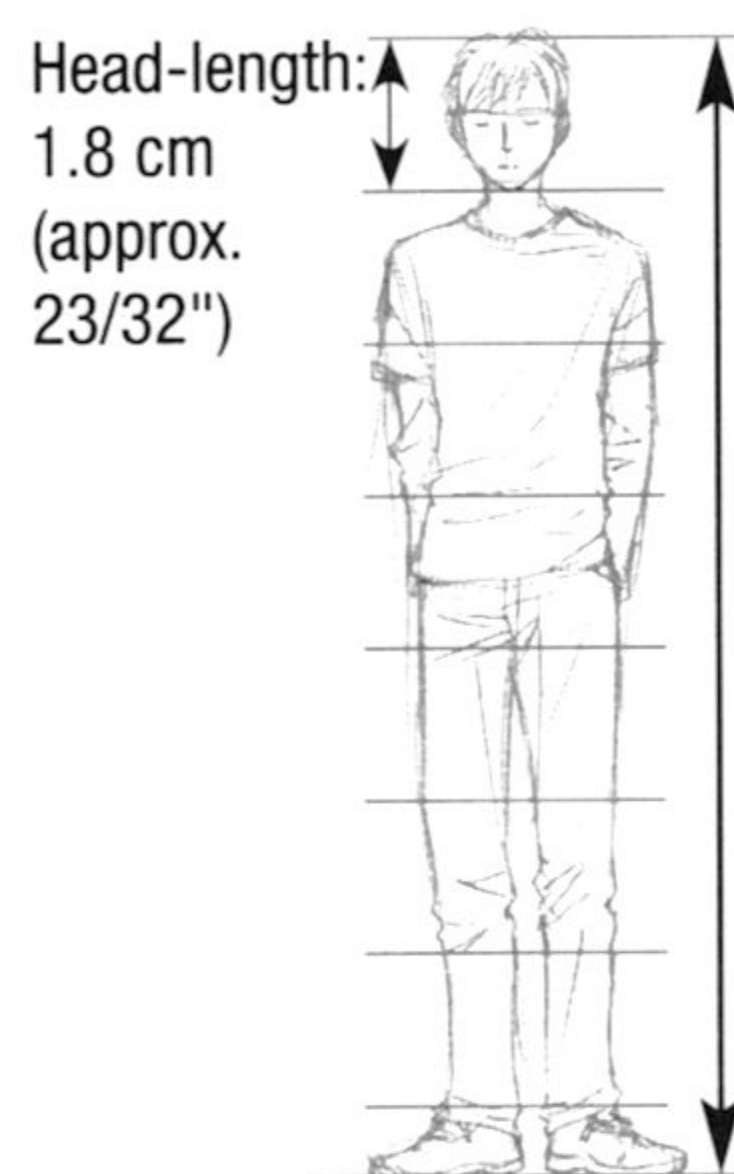


Draw a horizontal line on the shoes using the heel as a guide.



Draw horizontal lines at intervals of one head-length for the figure's full height.

③ Break down the character's total height into units of one head-length.



Head-length:
1.8 cm
(approx.
23/32")

Full height:
13.7 cm
(approx. 5
2/5")

$$13.7 \div 1.8 = 7.61$$

This character has a head-to-body ratio of 1:7.6. This may be rounded off to 1:7.5.

④



This character has a head-to-body ratio of 1:7.6, which indicates that normally this artist draws characters at a ratio of 1:7.5.

Rounding off the Head-to-Body Ratio



1:4.2 becomes 1:4.



1:3.3 becomes 1:3.5.

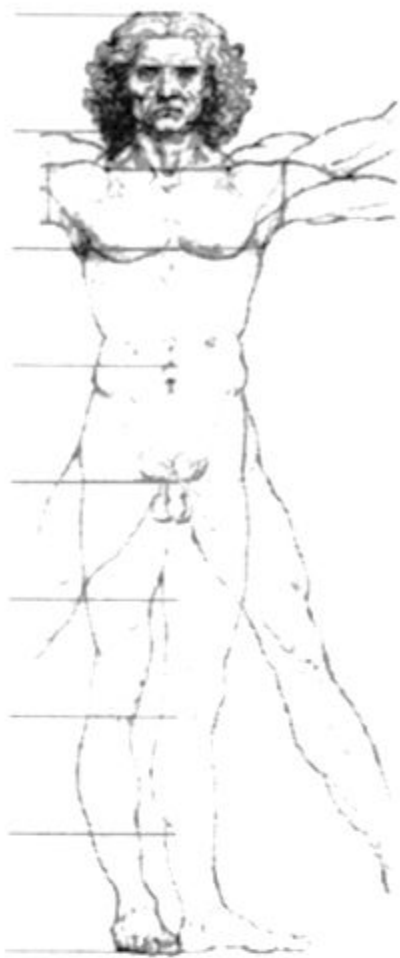
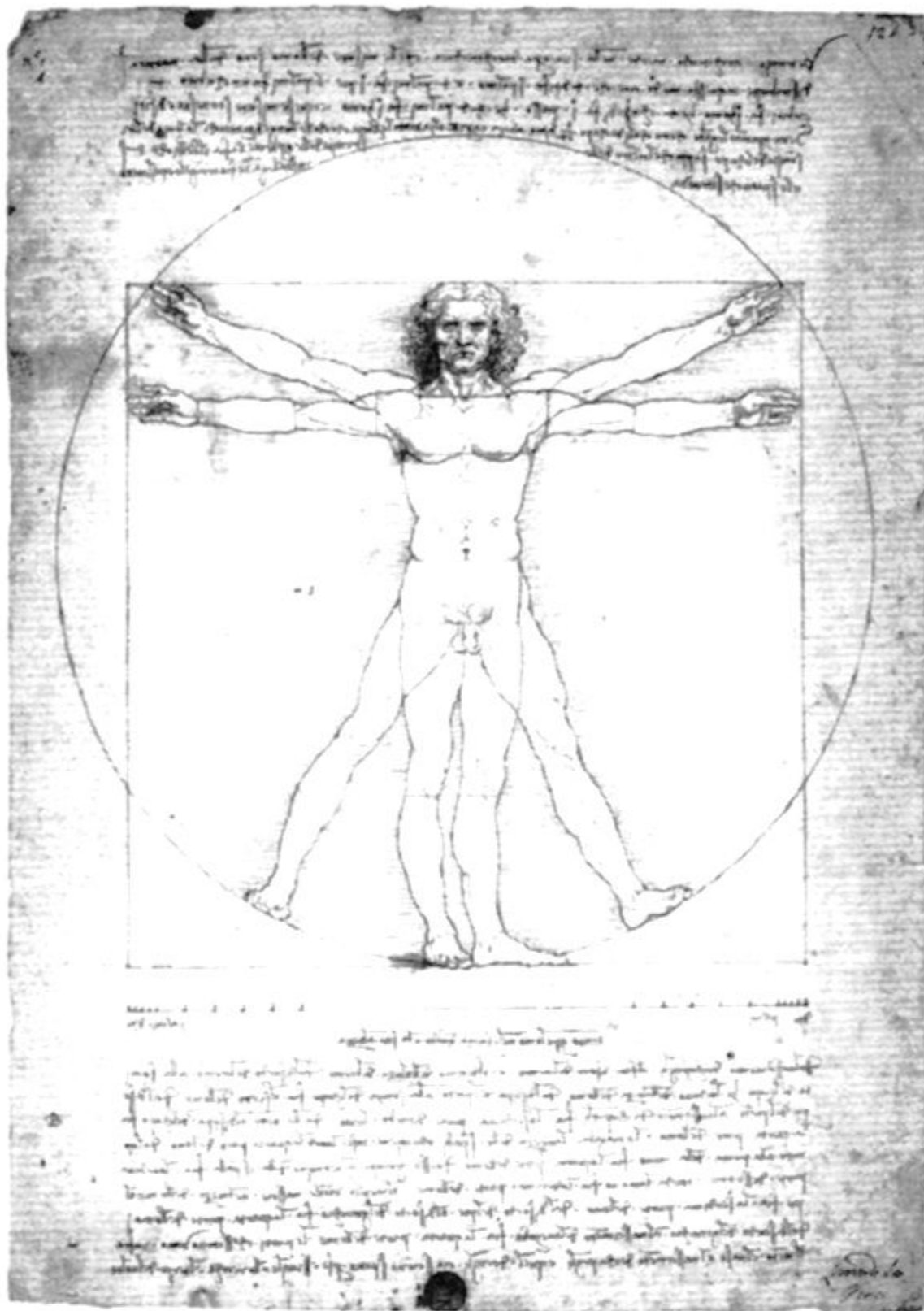


1:1.6 becomes 1:1.5.

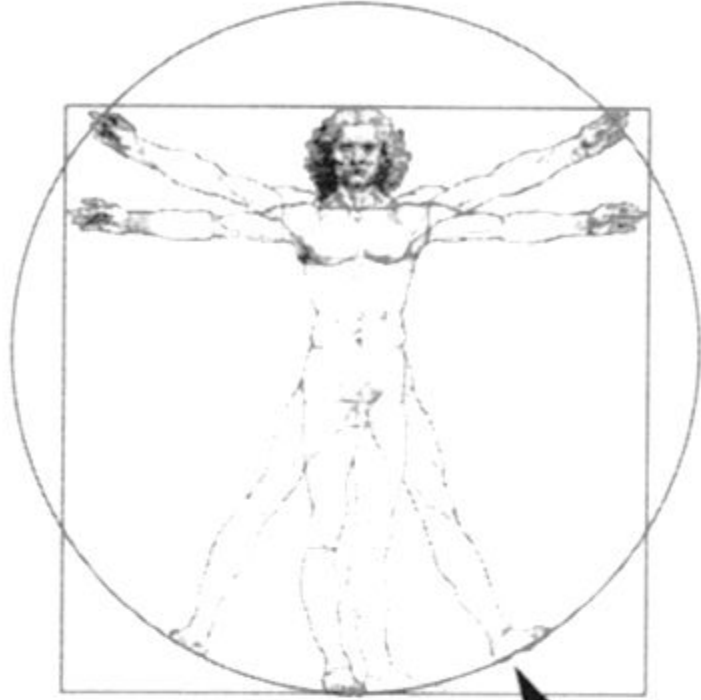
Often characters will be drawn at irregular head-to-body ratios, like 1:2.3 or 1:7.2. Try to simplify the head-to-body ratio, so that a 1:2.3 would become a 1:2.5 or a 1:7.2 would become a 1:7, etc.

Da Vinci's Proportions

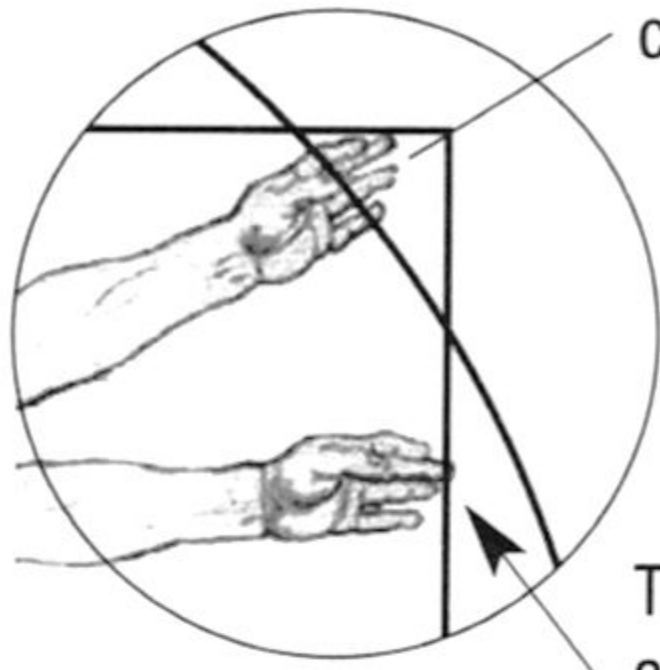
Leonardo da Vinci's *Vitruvian Man*, which shows a human figure circumscribed inside a circle and a square is an illustration of human proportions. This section turns the *Vitruvian Man* into a *manga* character.



1:8 head-to-body ratio



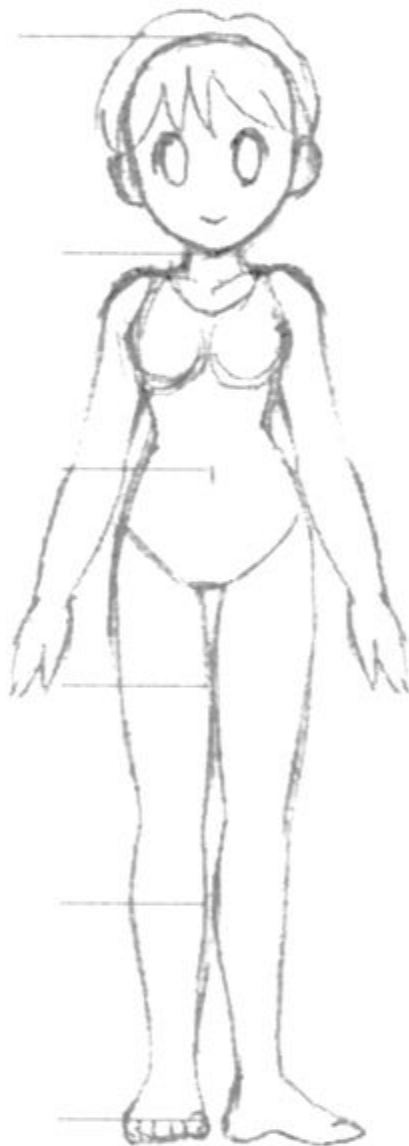
The feet touch the circumference.



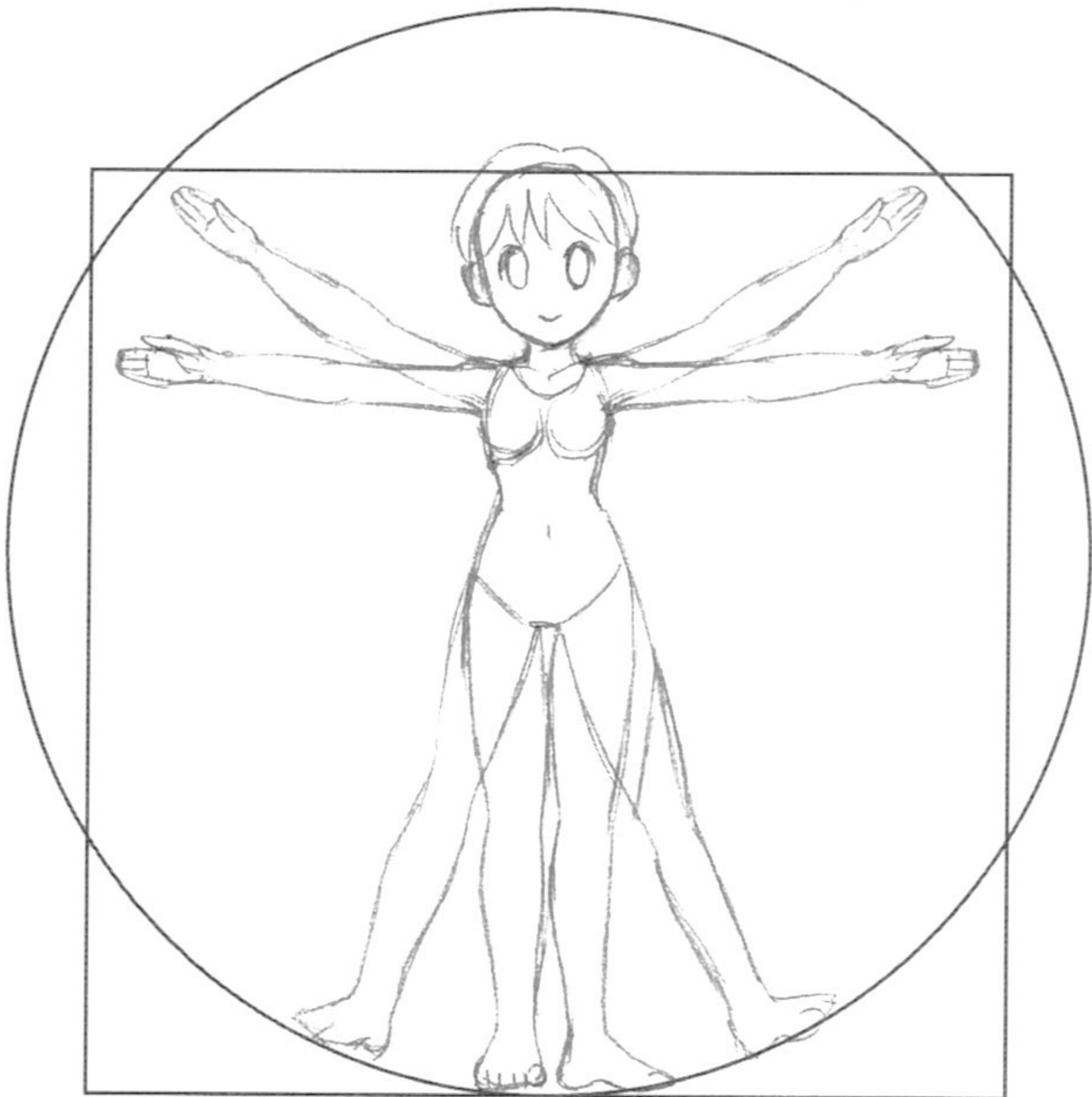
The fingers lie outside of the circumference.

The fingers of the arms extended out straight to the side touch the square's perimeter.

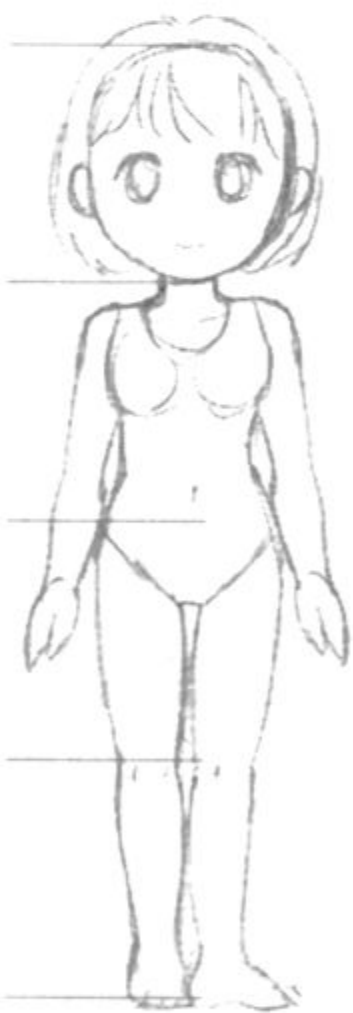
Leonardo da Vinci drew *Vitruvian Man* (a.k.a. *Canon of Proportions* and *Proportions of Man*) during the late 15th century. Vitruvius, after whom da Vinci's study of the human proportions was named, was a first century BC ancient Roman architect. Da Vinci drew Vitruvian Man according to the human proportions described by Vitruvius in *De Architectura*, a treatise on architecture in which he wrote that a man could be circumscribed within a circle and a square. The *Vitruvian Man* presently appears on the Italian 1 Euro coin. (In the collection of the Academy of Fine Arts, Venice)



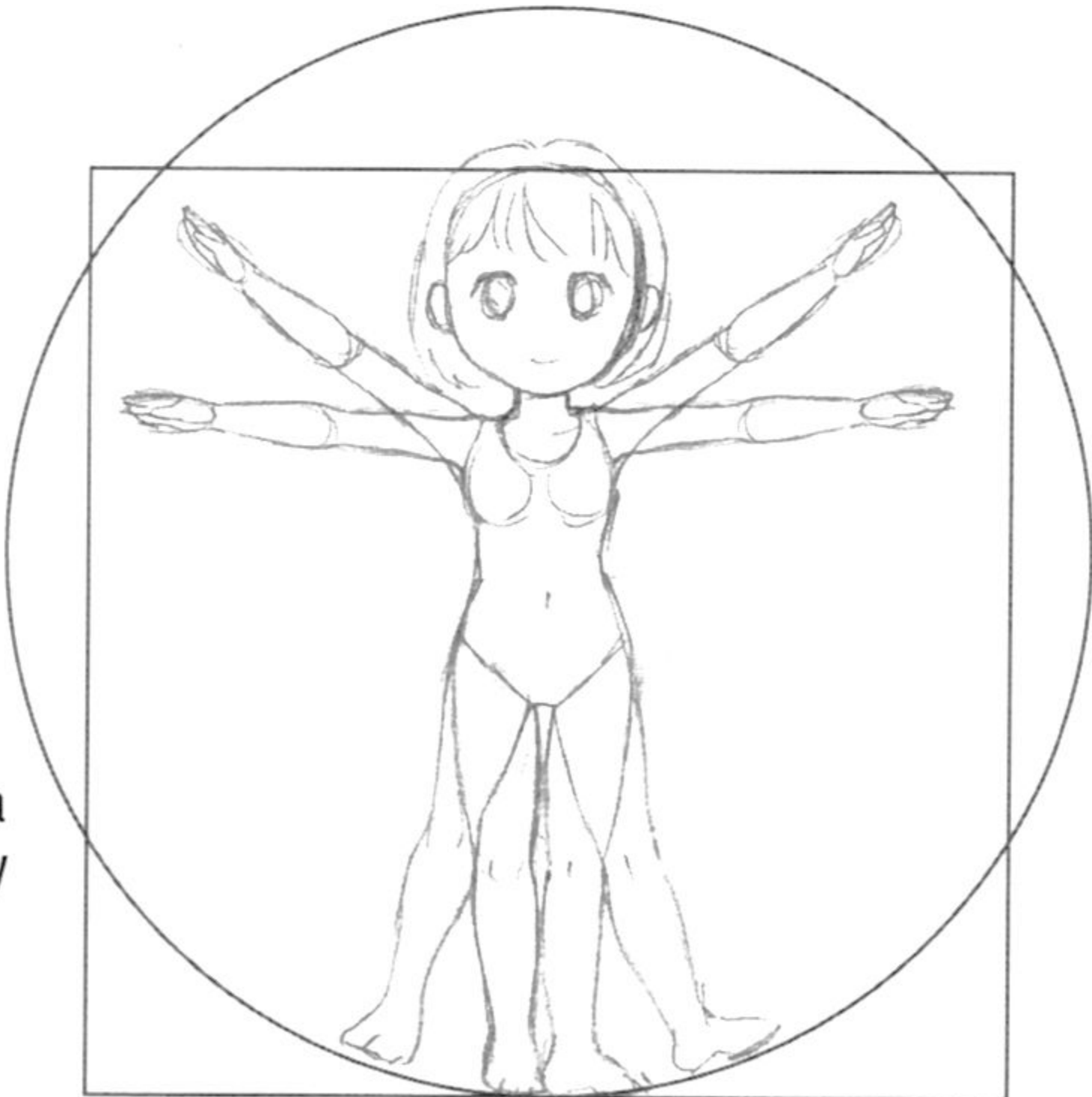
Contrasted with a 1:5 Head-to-Body Ratio Character



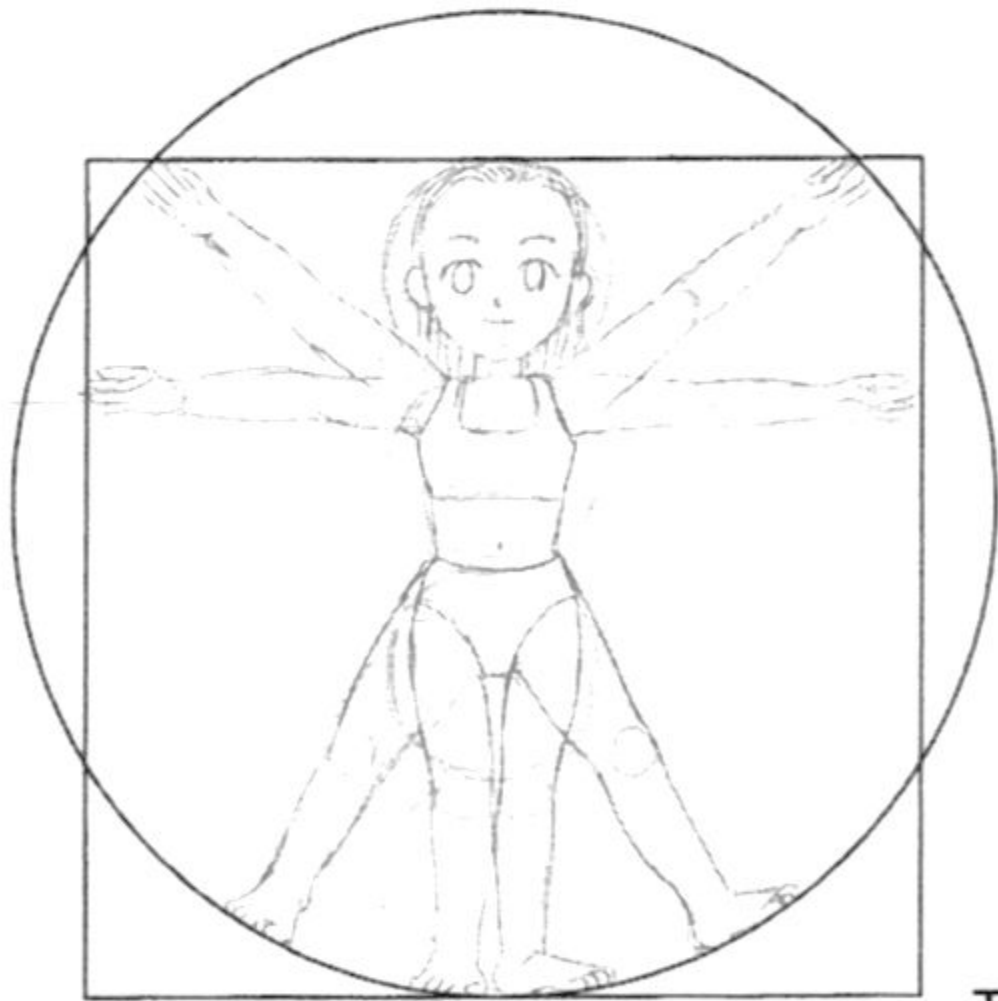
The feet touch the circle, but the fingers do not reach the square. This experiment illustrates that a 1:5 character looks more visually pleasing with arms that are shorter than a 1:8 character's.



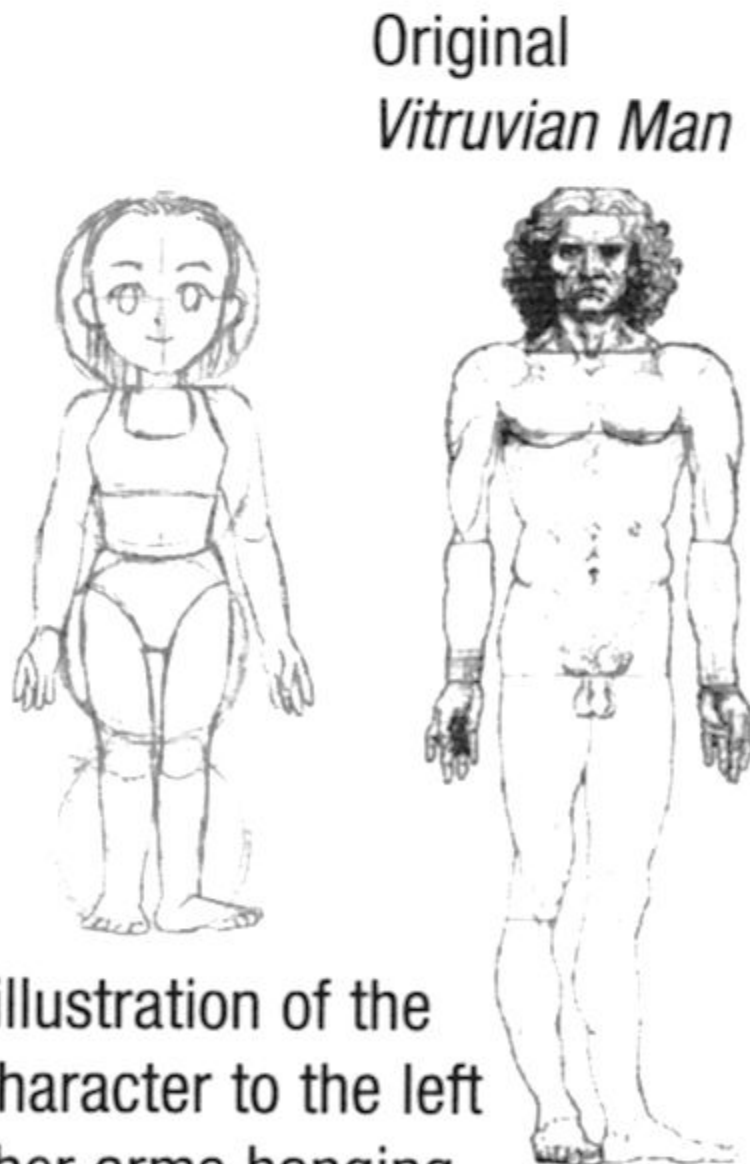
Contrasted with a 1:4 Head-to-Body Ratio Character



As with the 1:5 character, the feet of the 1:4 character still touch the circle, but the fingers do not reach the square. On the contrary, the distance between the fingers and the square's perimeter has widened. As the number of head-lengths comprising the character's total height lessens, the shorter the arms should be drawn to achieve visual balance.

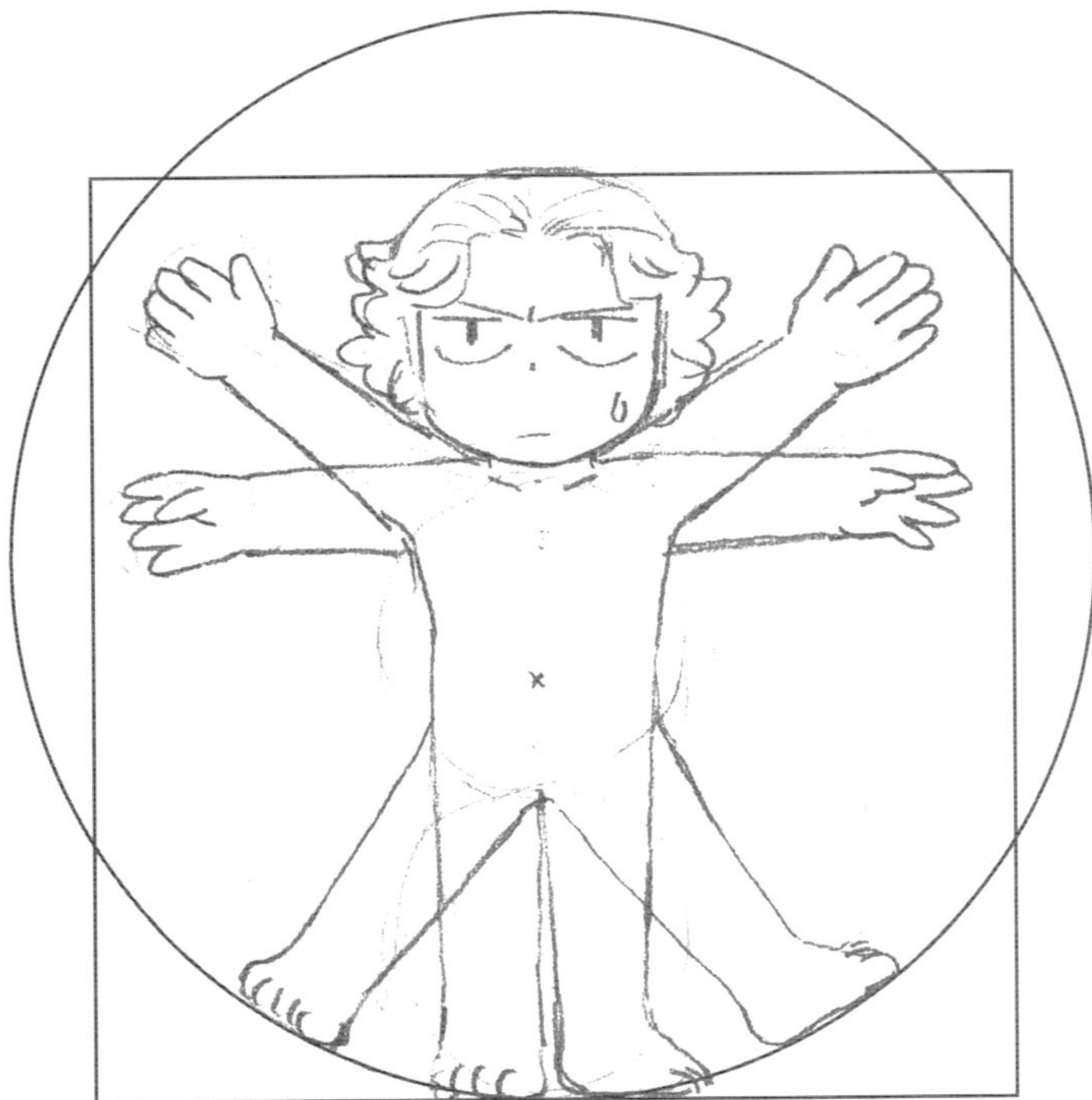


This figure shows a 1:4 character with the head and torso made wider. The arms and legs also became wider; however, they correspond proportionally to da Vinci's *Vitruvian Man*.



Original *Vitruvian Man*

This illustration of the 1:4 character to the left with her arms hanging to her sides shows that while she might proportionally match Vitruvius's description, her arms appear bizarrely long.

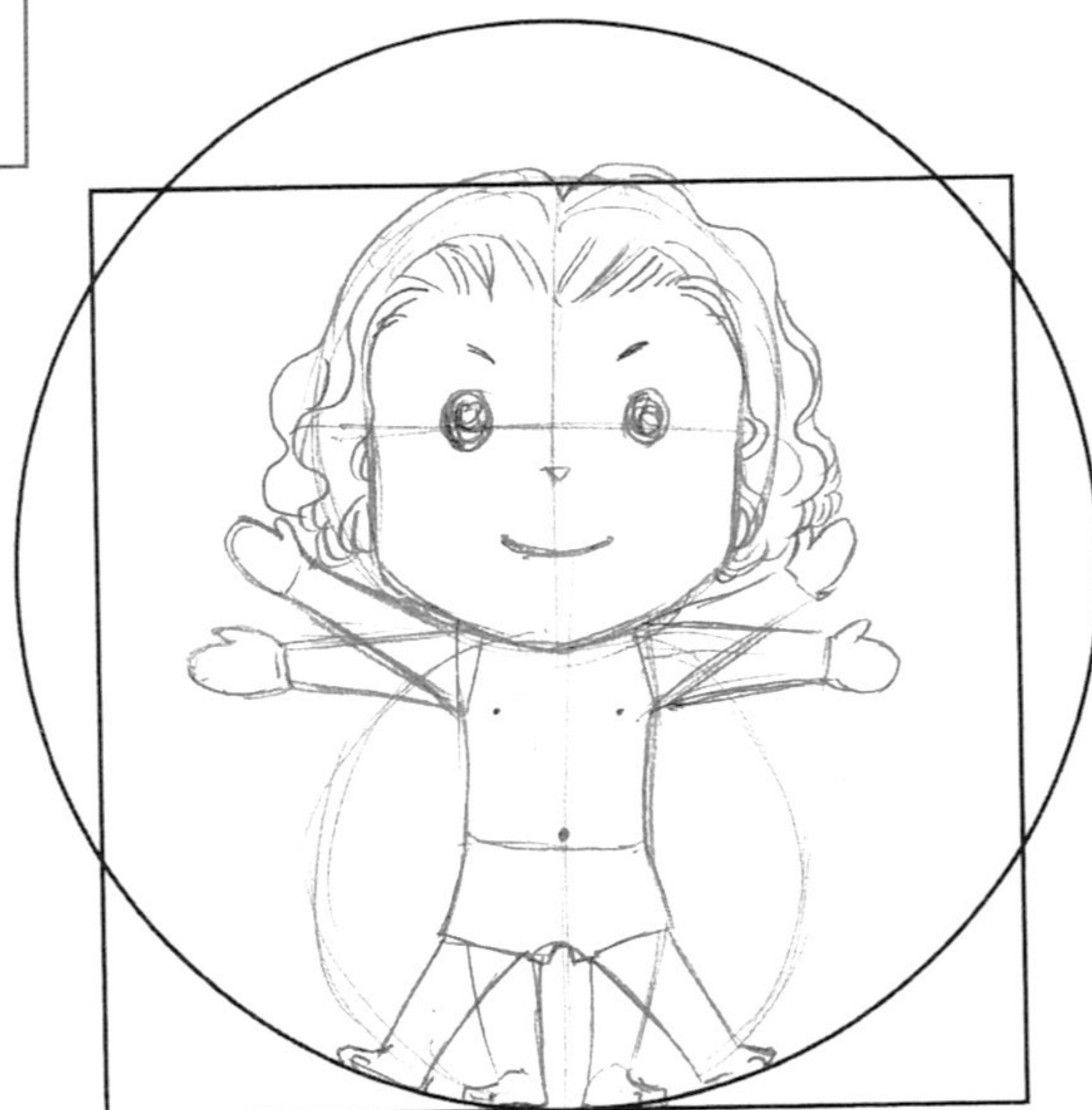


1:3 Head-to-Body Ratio

The distances from the square's borders to the hands increase even further.

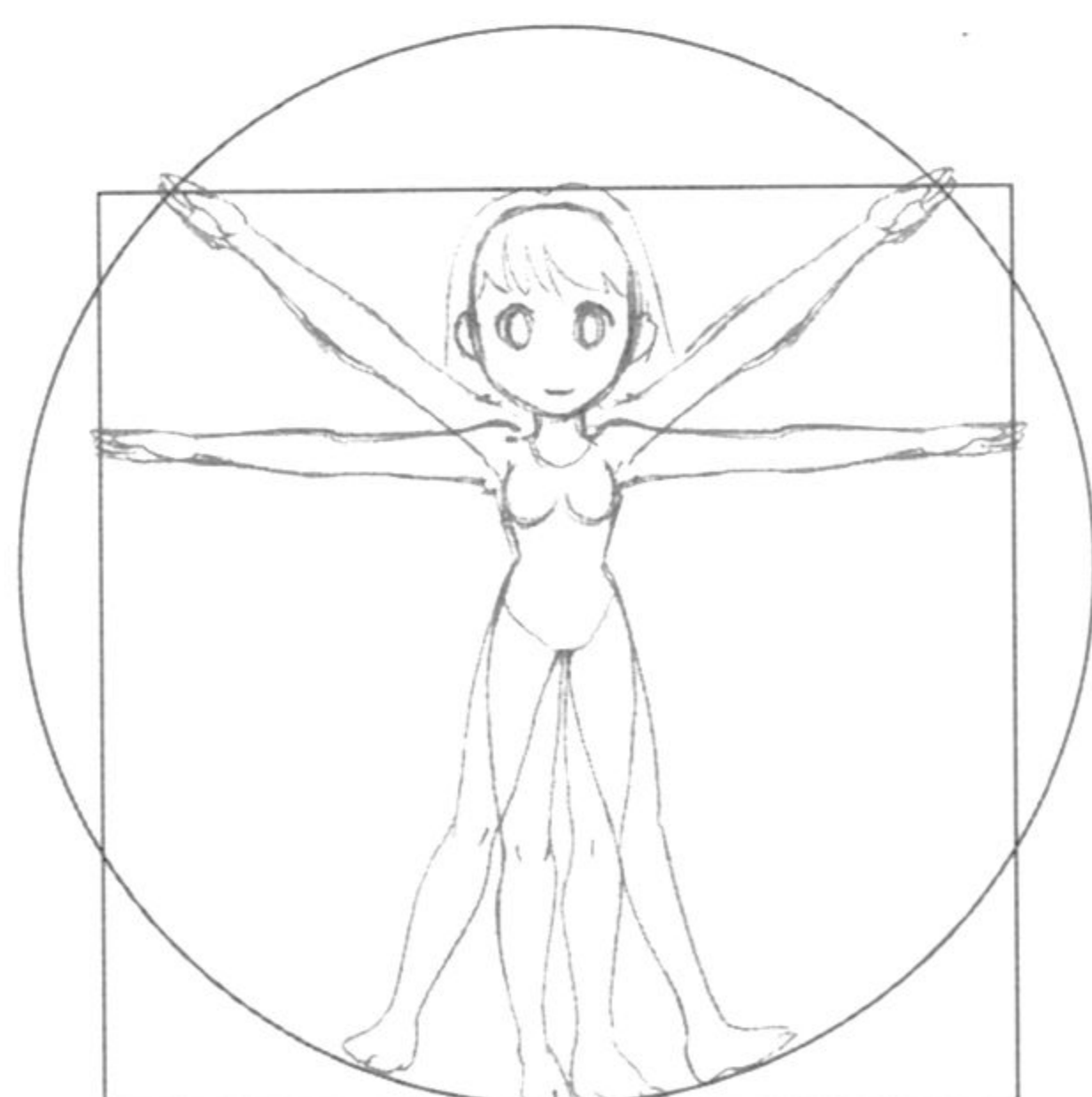
Conclusion:

The law of *manga* character proportioning states that short arms result in a visually balanced character when the character is proportioned to be short.

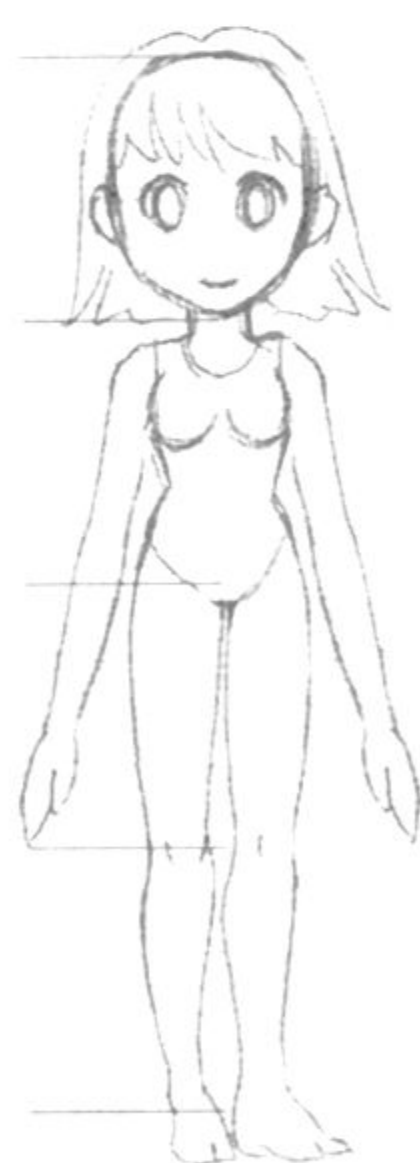


1:2 Head-to-Body Ratio

Unless the arms' lengths are doubled, the hands will not be able to reach the square's borders.



Ref. Fig.: A 1:4 head-to-body ratio drawn with arms long enough to reach the square's borders



Overly long arms result in awkward proportioning.



The above shows the head of a 1:8 head-to-body ratio character paired with shrunken and modified torsos on two 1:2 bodies of different builds.

Proportional Sketching from Low and High Angles

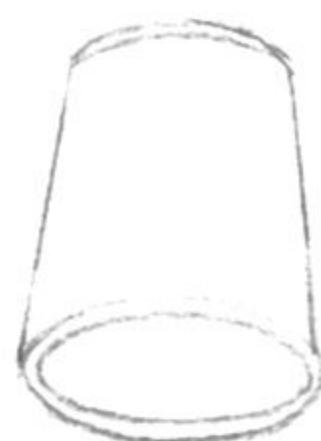
Figures viewed from above or below are drawn in perspective, which generates visual impact.

Low Angle Compositions

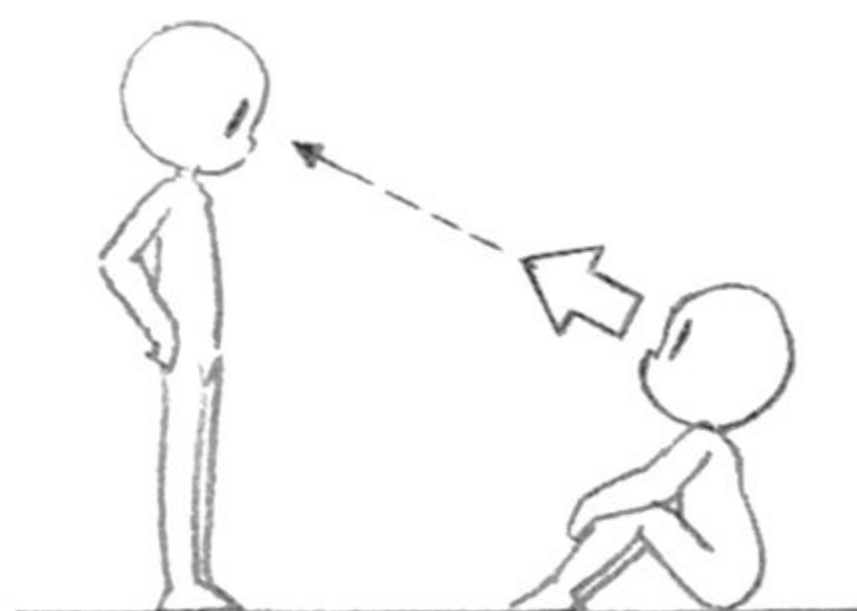
The figures on this page were composed as if viewed from below.



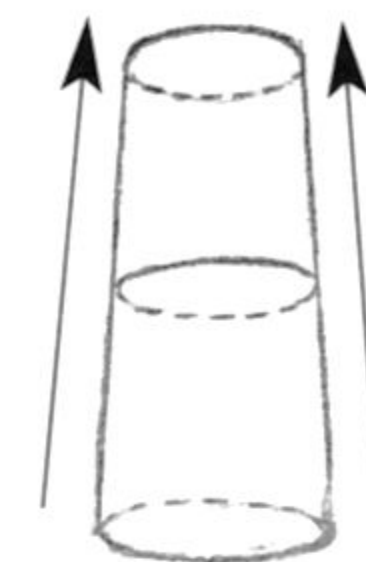
1:6.5 head-to-body ratio



The figure becomes foreshortened, growing proportionally larger as the eye travels down the figure and proportionally smaller as the eye travels up the figure.



Viewing a standing figure from a seated position creates a low angle composition in the mind's eye.



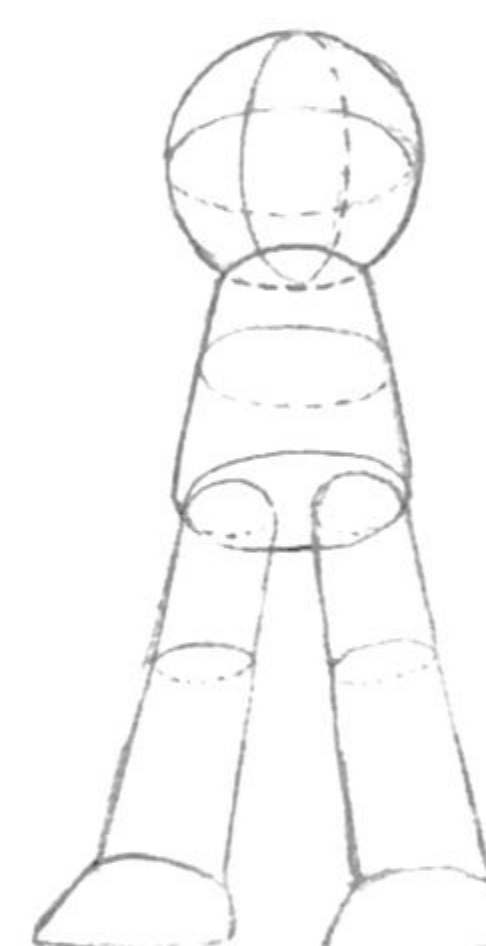
Draw the figure as if narrowing toward the top.



1:3 head-to-body ratio



1:2 head-to-body ratio



Draw a simple solid form to capture the general form.



Viewed from underneath

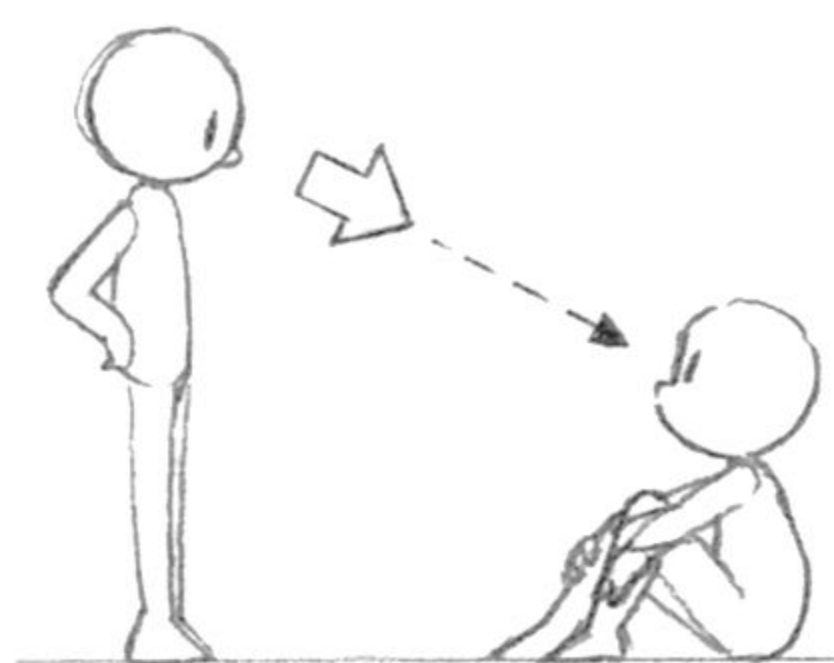


Use an angle like this when showing a character floating in space or when standing over a glass panel, etc.

High Angle Compositions

The figures on this page were composed as if viewed from above.

The addition of a line denoting the ground plane or a wall clarifies the angle of composition.



Looking down on a figure creates a low angle composition in the mind's eye.



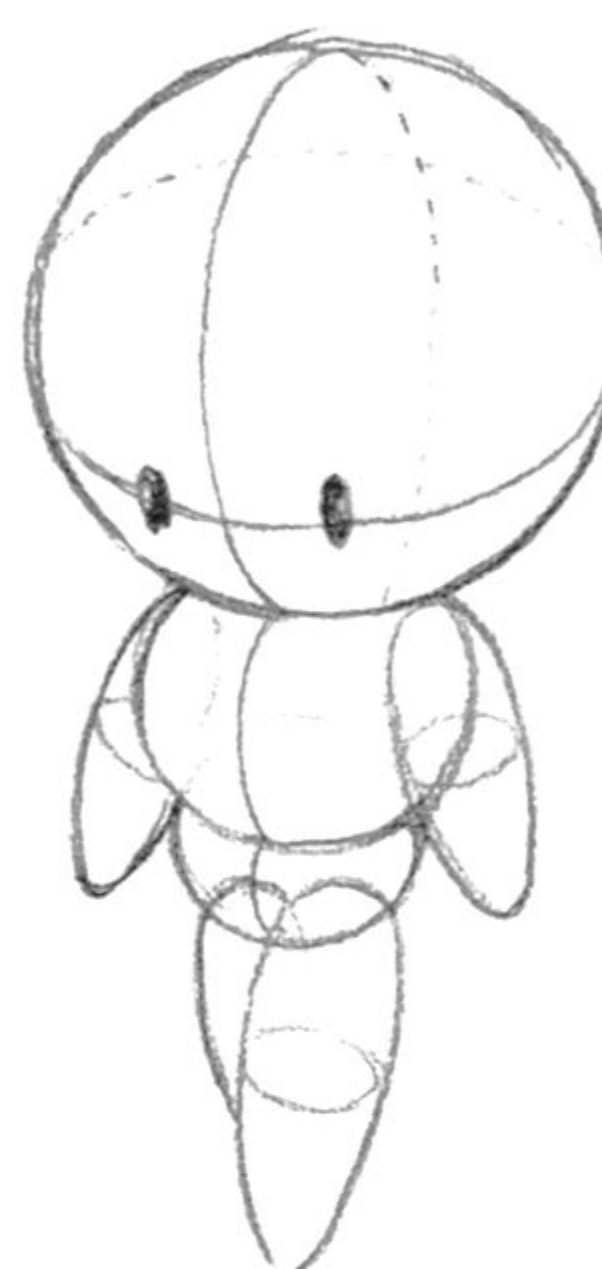
The top lid of a can becomes visible when viewed from a high angle.



1:6.5 head-to-body ratio



1:3 head-to-body ratio



Model diagrams



1:3 head-to-body ratio



1:2 head-to-body ratio



From directly overhead, the head comprises almost all of what can be seen.

For a character with attractive proportions, some of the arms, legs, and torso are visible.

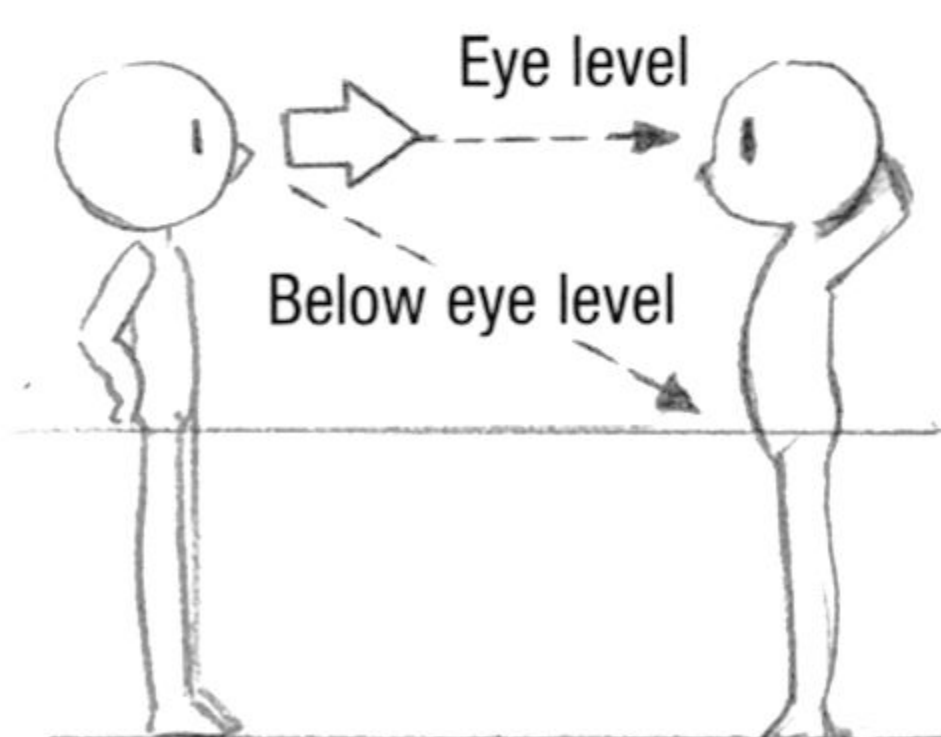


For a 1:3 head-to-body ratio character, some of the arms and legs are visible.



For a 1:2 head-to-body ratio character, the arms and legs are scarcely visible.

High Angles within Level Compositions

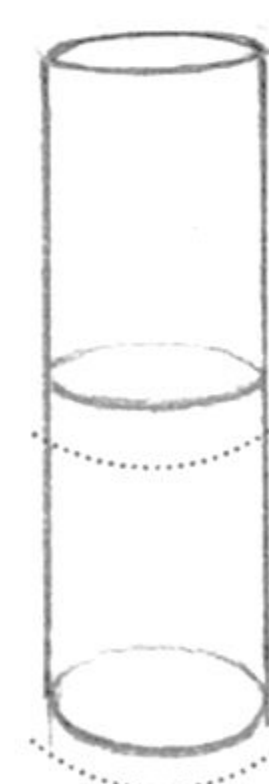


In a standard standing pose, any body part beneath the face when viewed becomes composed from a high angle.

As a result, guidelines for the waist and skirt hem describe downward arcing curves.



Parts of an object appear increasingly from a low angle and curves gradually more dramatic as the eye travels down the given object.



High and Low Angles

The chin's underside becomes visible from a low angle, while the top of the head comes more into view from a high angle. Pay careful attention to the eyes' positions when sketching the character.

Low Angles Draw heads viewed from a low angle.



Front view of a standard character



The undersides of the chin and the nose become visible from a low angle. The eyes take on crescent-shaped outlines.



Abstraction should be echoed throughout the entire character's design.



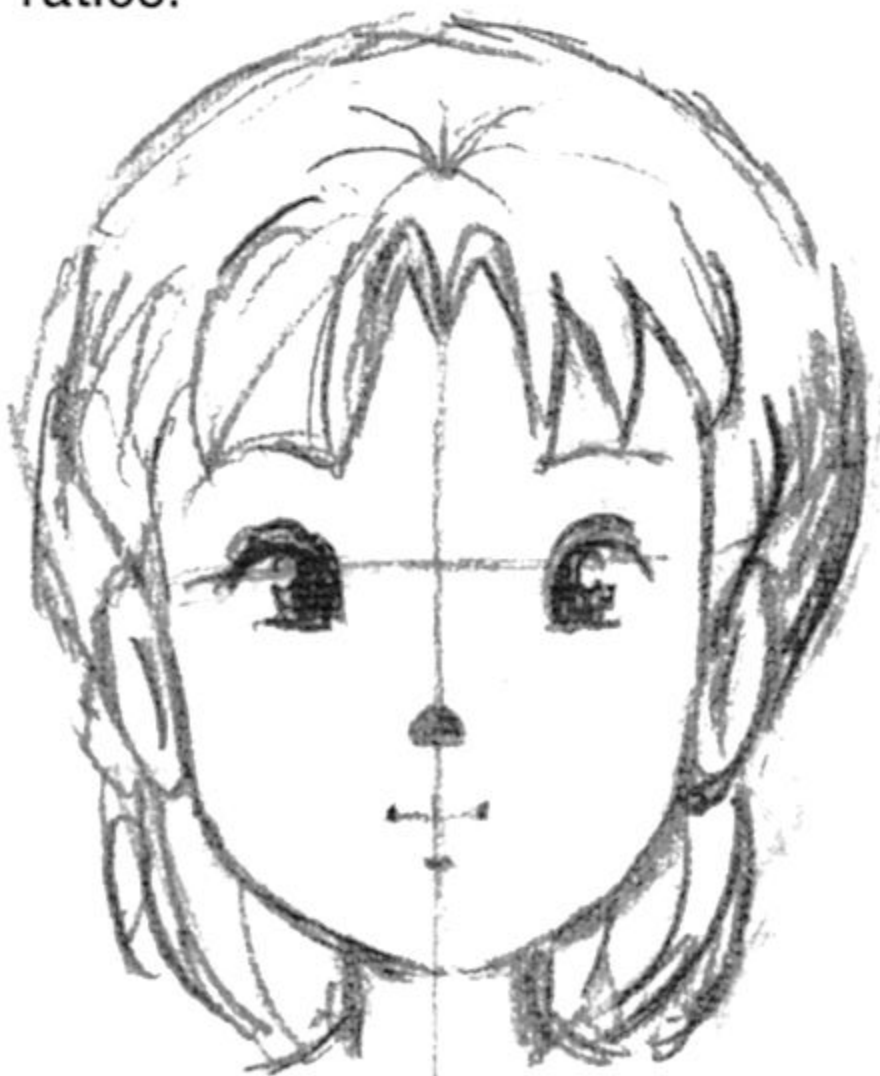
The eyes retain their shape but shift high of center when viewed from a low angle. The undersides of the mouth and chin come more into view.



Stylization such as seen in this character may be used with 1:2 to 1:6 head-to-body ratios.



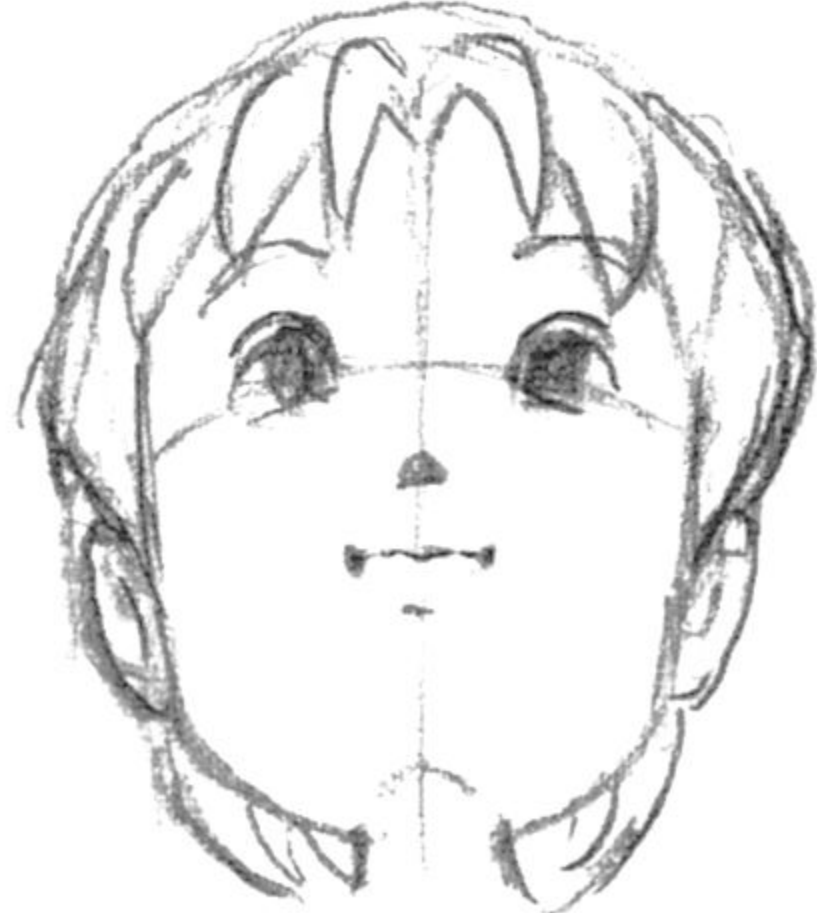
The portion of the head above the forehead disappears from view from a low angle. The undersides of the mouth and chin come more into view.



Moderate stylization such as seen in this character may be used with 1:3 head-to-body ratios and greater.



Include the bottom surface of the nose even if the nose is small and abstracted.

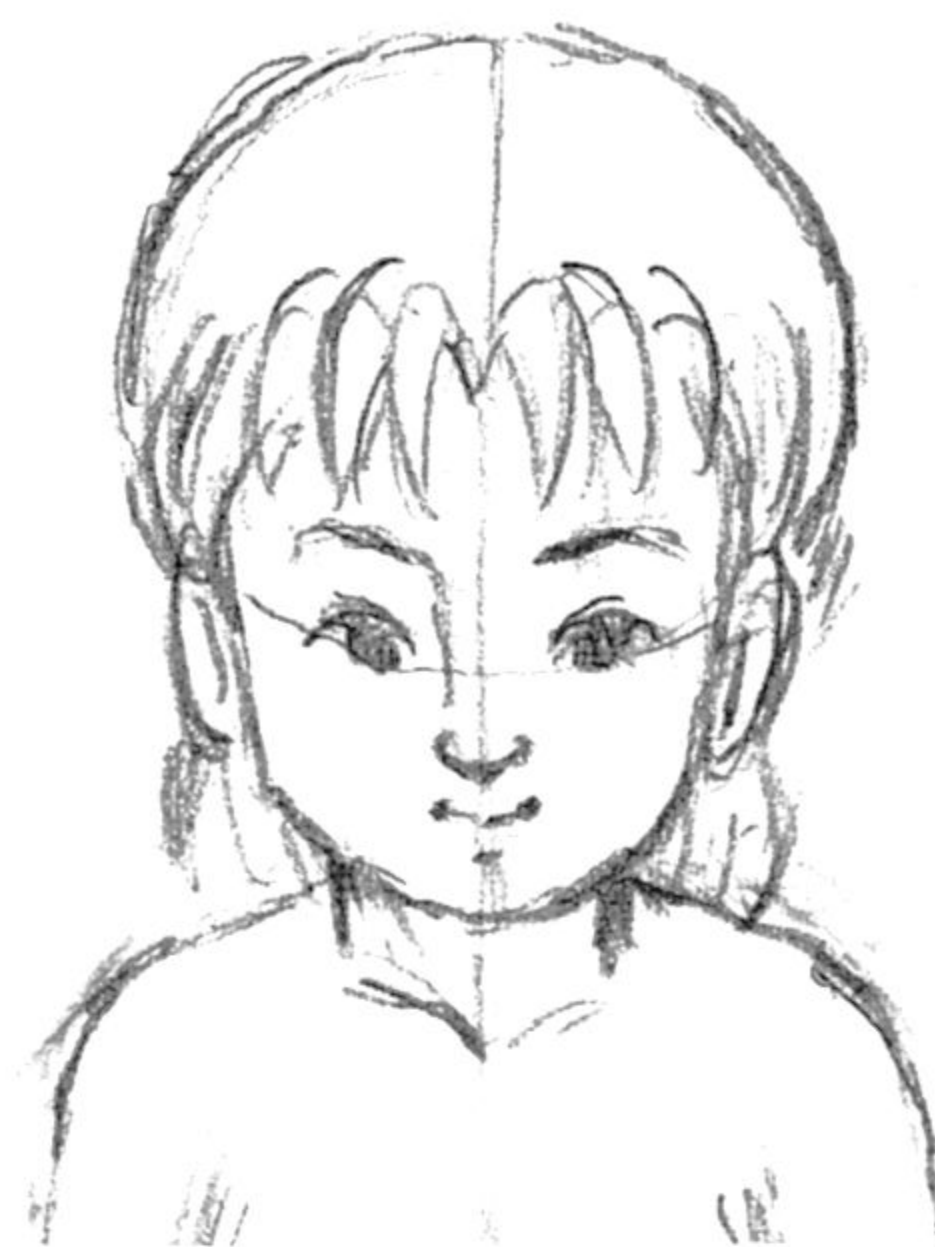


High Angles

Compose the head from a high angle when the character is looking down.



Standard character



The shape of the nose changes, and the nostrils are no longer visible.



1:2 head-to-body ratio



1:3 head-to-body ratio



1:4 head-to-body ratio



Putting Low and High Angles to Practice

First draw the composition from a level view before composing from a low or high angle.

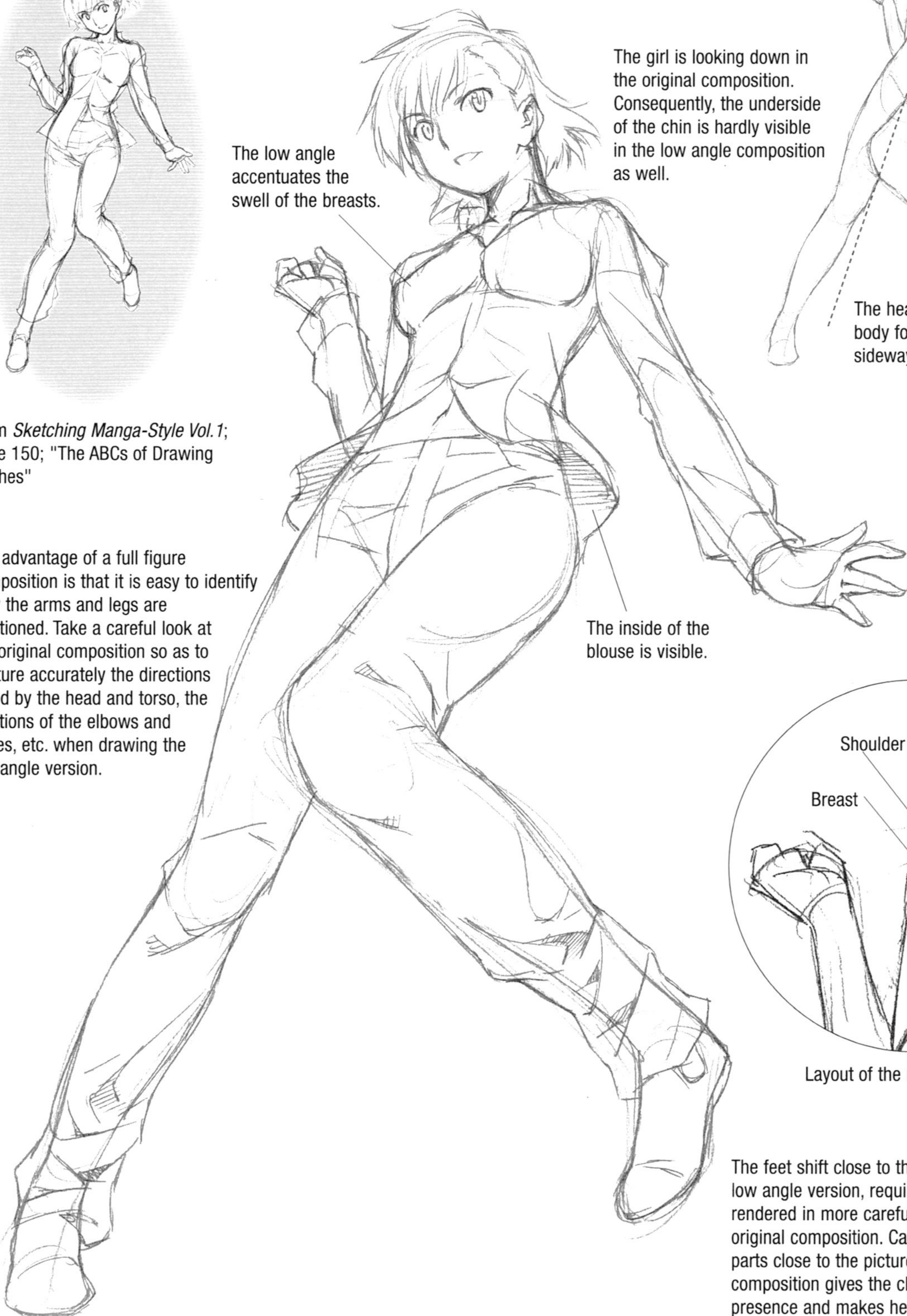
Pose 1

Low Angle: Viewed from the Lower Right



From *Sketching Manga-Style Vol. 1*; page 150; "The ABCs of Drawing Clothes"

The advantage of a full figure composition is that it is easy to identify how the arms and legs are positioned. Take a careful look at the original composition so as to capture accurately the directions faced by the head and torso, the positions of the elbows and knees, etc. when drawing the low angle version.



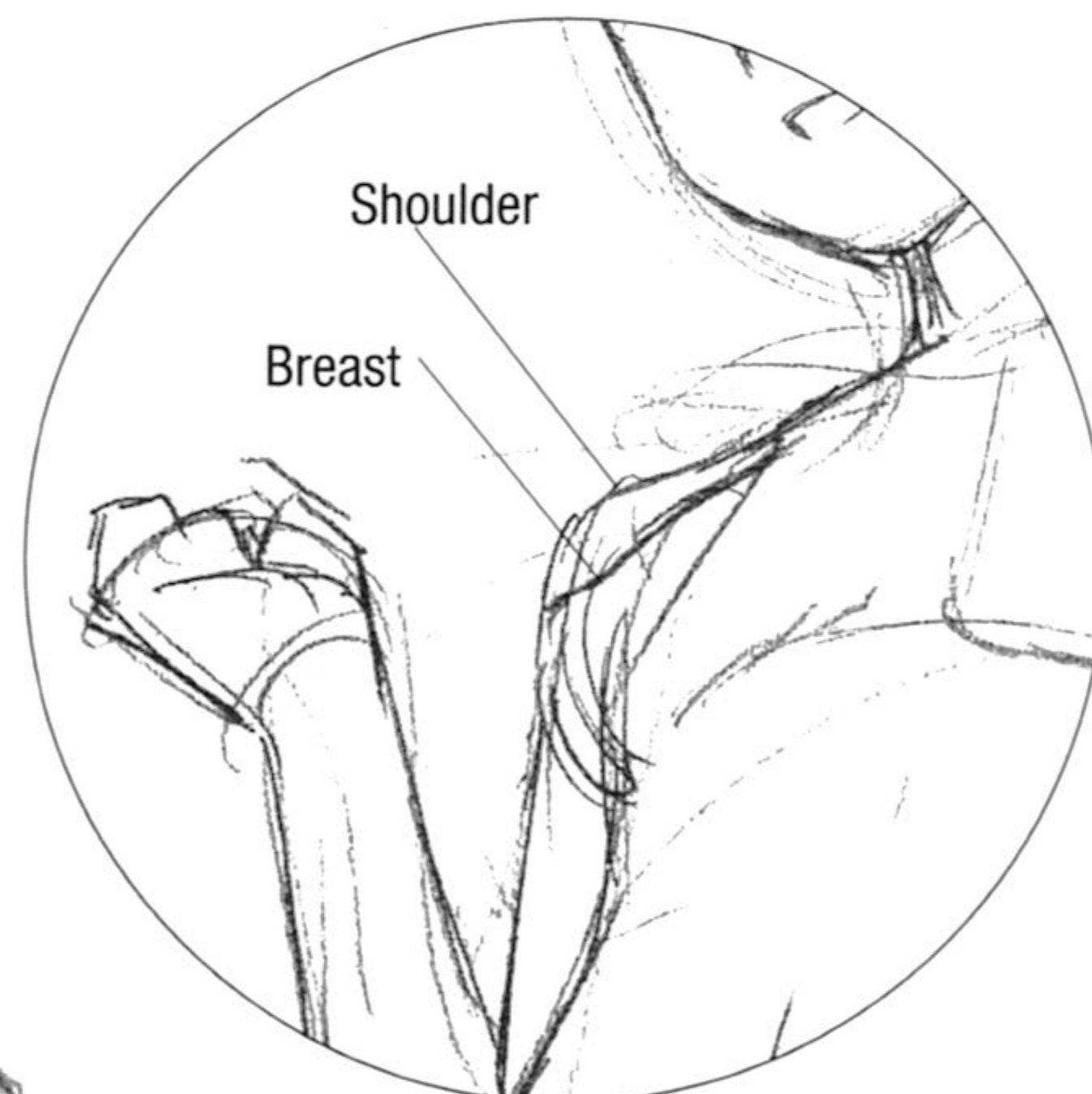
The low angle accentuates the swell of the breasts.

The girl is looking down in the original composition. Consequently, the underside of the chin is hardly visible in the low angle composition as well.

The inside of the blouse is visible.

The elbow is hidden behind the torso.

The head and body form a sideways "V".



Layout of the right shoulder

The feet shift close to the picture plane in the low angle version, requiring that they be rendered in more careful detail than in the original composition. Carefully executing those parts close to the picture plane in a low angle composition gives the character a sense of presence and makes her more convincing.

Using Attractive Characters as a Basis for *Chibi* Character Designs



This section covers designing a *chibi* based on this original character.



Fabric bunches around the shoulder forming creases.



Figures depicted within the circles show parts of the original attractive character.

Refer to the hand and sleeve on the original character when determining their angles on the *chibi*.



Sleeve cuff



For the *chibi*, the sense that the character's head is turned toward the picture plane has been emphasized.

Bunching and creases around the shoulder have been omitted.

The sleeve cuff has been simplified, and the hands and fingers have been shortened and thickened to look stylistically more like those of a *chibi*.

When drawing a *chibi*, reduce the amount of creases and bunching in the fabric by around 1/3 to 1/5.



Sleeve cuff



Converting to a Low Angle Composition: Low, Left Angle

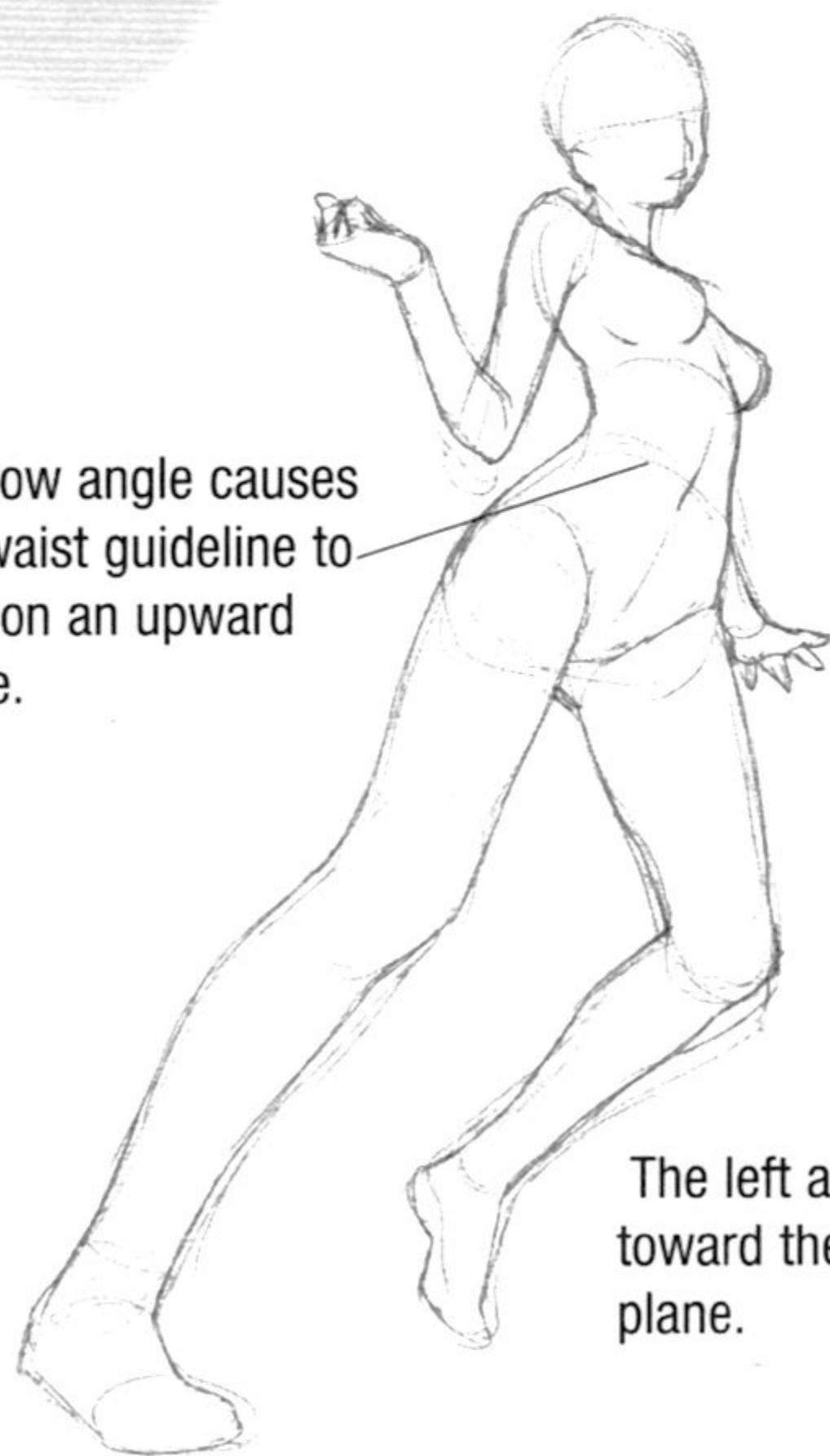


When the torso is composed in profile, showing where the shoulder attaches to the torso gives the torso a sense of volume.

The head faces the left.

In this composition, the use of a straight line from this low angle perspective causes the stomach to appear taut, giving the character an attractive build. If an upward curve were used to describe the pants' waist, the belly would appear to stick out.

The low angle causes the waist guideline to take on an upward curve.



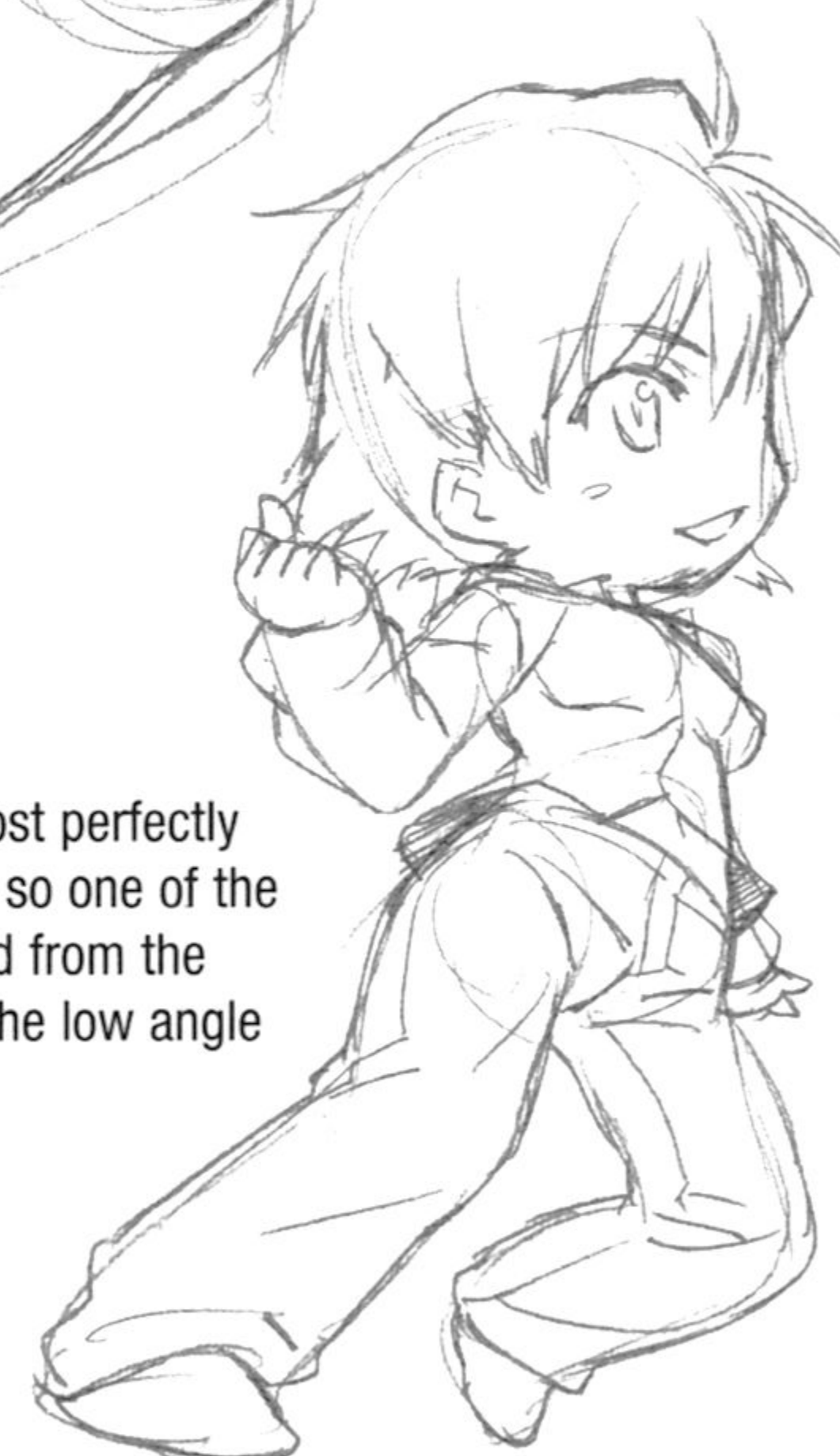
The left arm is turned toward the picture plane.



In the original composition, the knees are drawn close together indicating that the legs are actually closer together than they appear in the low angle composition. However, this is not a technically drafted drawing, so artistic license was used to draw the legs further apart, thereby heightening the low angle composition's impact.

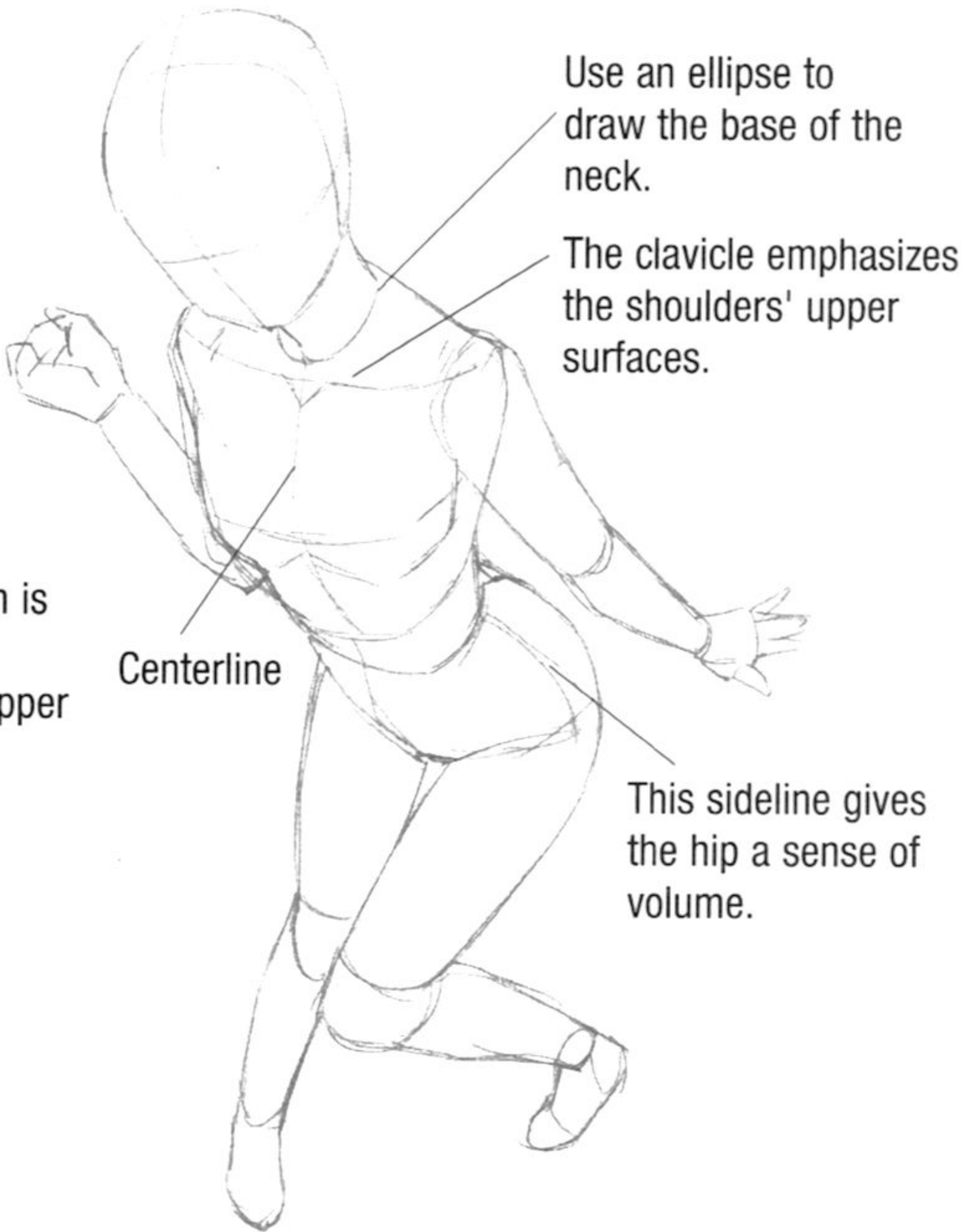


The head is almost perfectly turned in profile, so one of the eyes was omitted from the *chibi* version of the low angle composition.



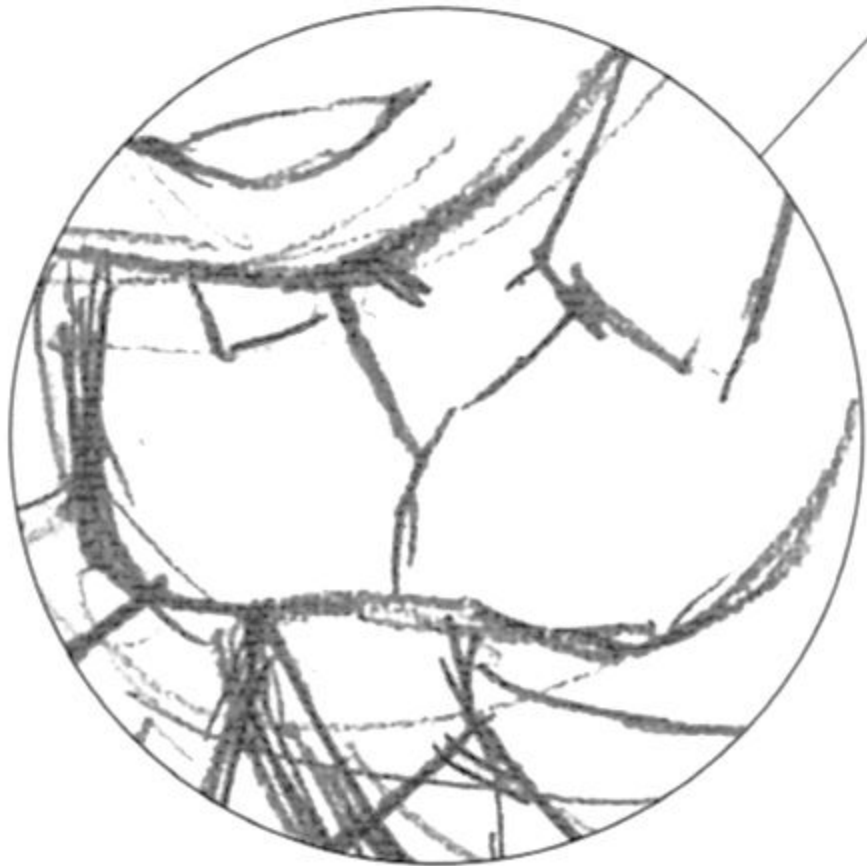
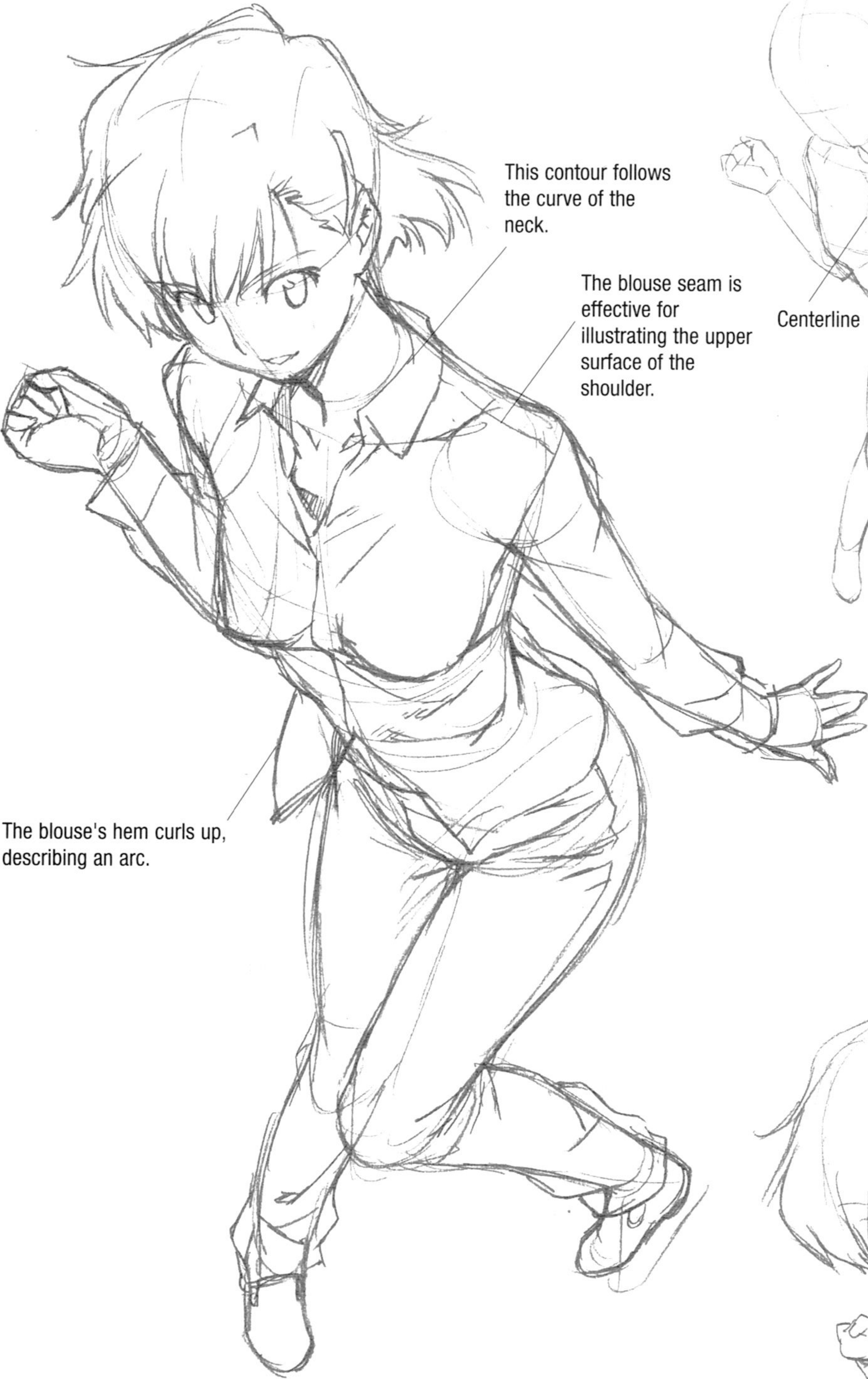
Converting to a High Angle Composition: High, Left Angle

Use lines that give the figure a sense of volume.



This contour follows the curve of the neck.

The blouse seam is effective for illustrating the upper surface of the shoulder.



Simplify the blouse's open collar and chest contours when drawing the *chibi* version.

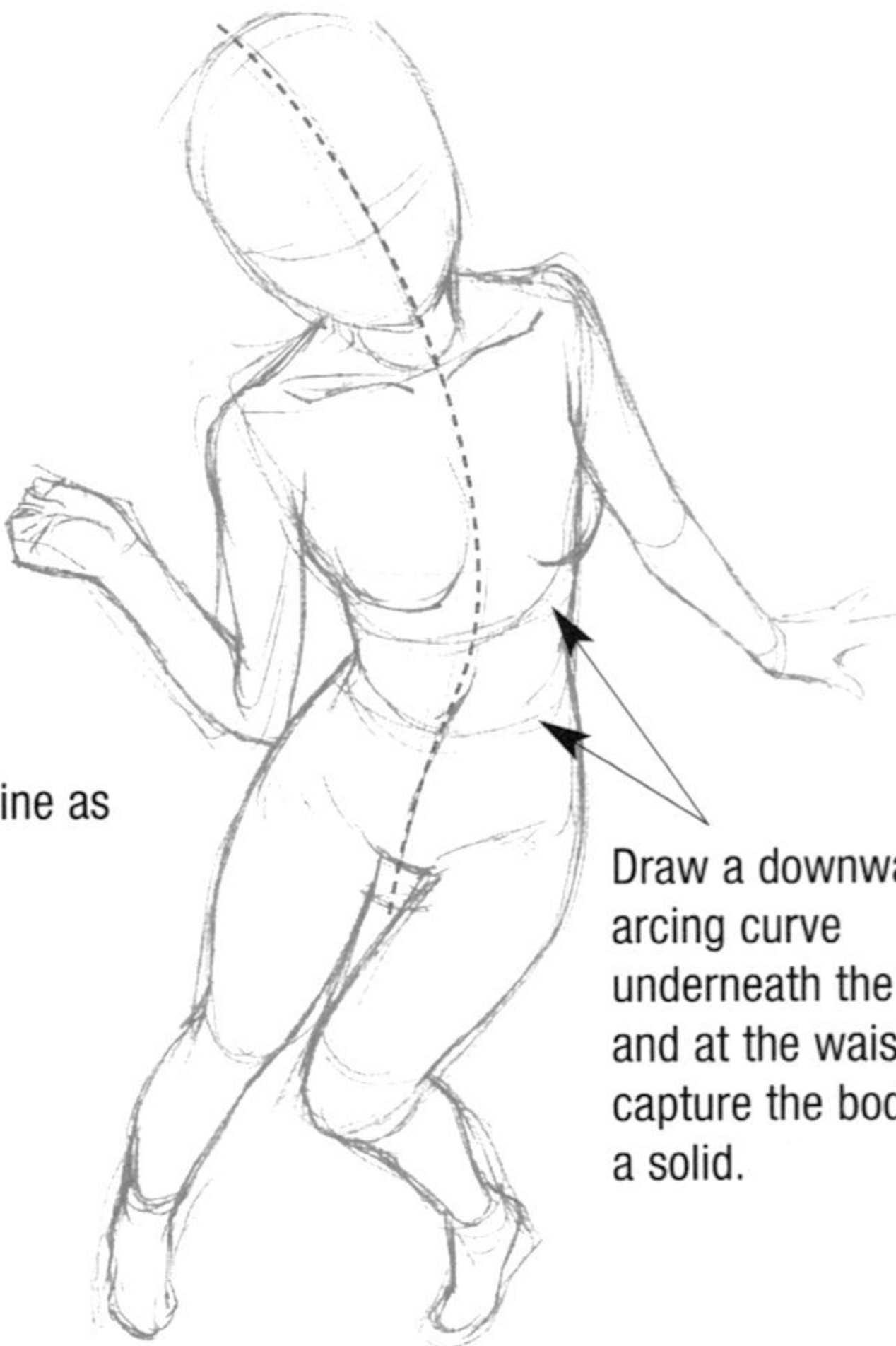


The angles of the arms and positions of the hands and knees (i.e. how the legs are held) become clarified when viewed from overhead.

Converting to a High Angle Composition: Moderately High, Right Angle



Draw the centerline as an "S" curve.



Draw a downward arcing curve underneath the chest and at the waist to capture the body as a solid.



Because this is not a dramatic, bird's-eye view, the body appears long.

The cuff follows the wrist's curved surface.



This angle makes characters with smaller head-to-body ratios appear endearing.

Converting to a High Angle Composition: Rear, Right Angle

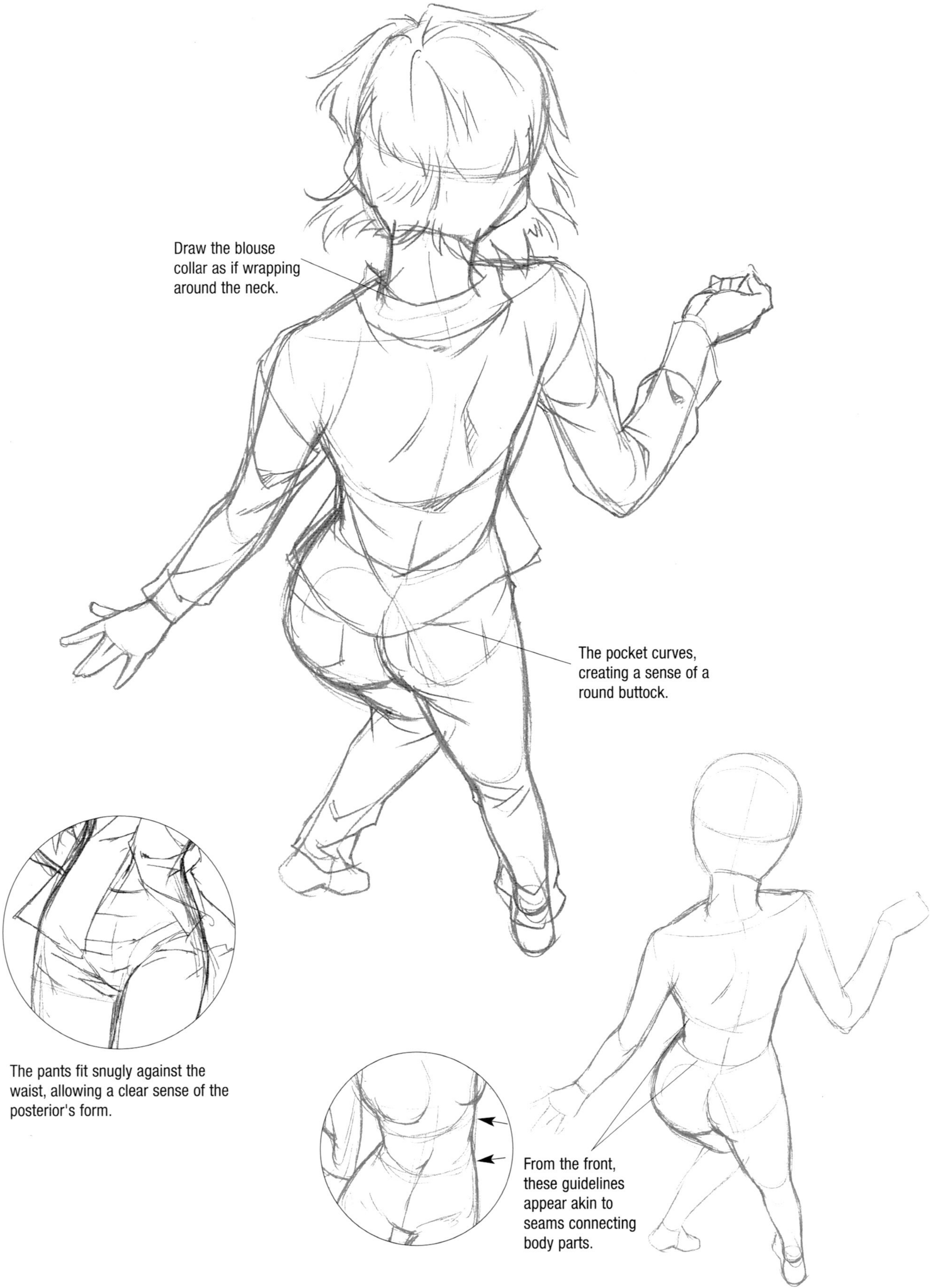
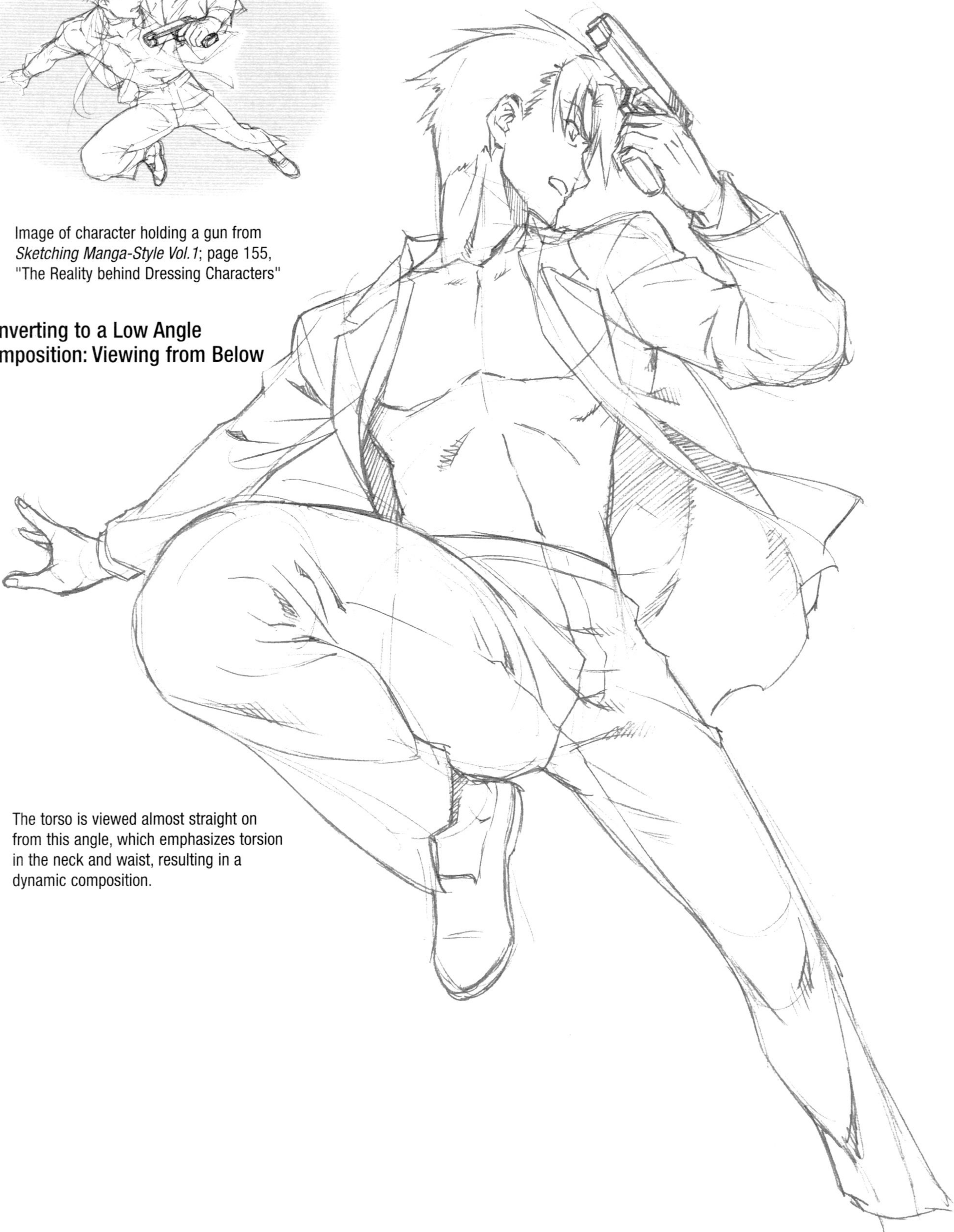




Image of character holding a gun from *Sketching Manga-Style Vol. 1*; page 155, "The Reality behind Dressing Characters"

**Converting to a Low Angle
Composition: Viewing from Below**



The torso is viewed almost straight on from this angle, which emphasizes torsion in the neck and waist, resulting in a dynamic composition.

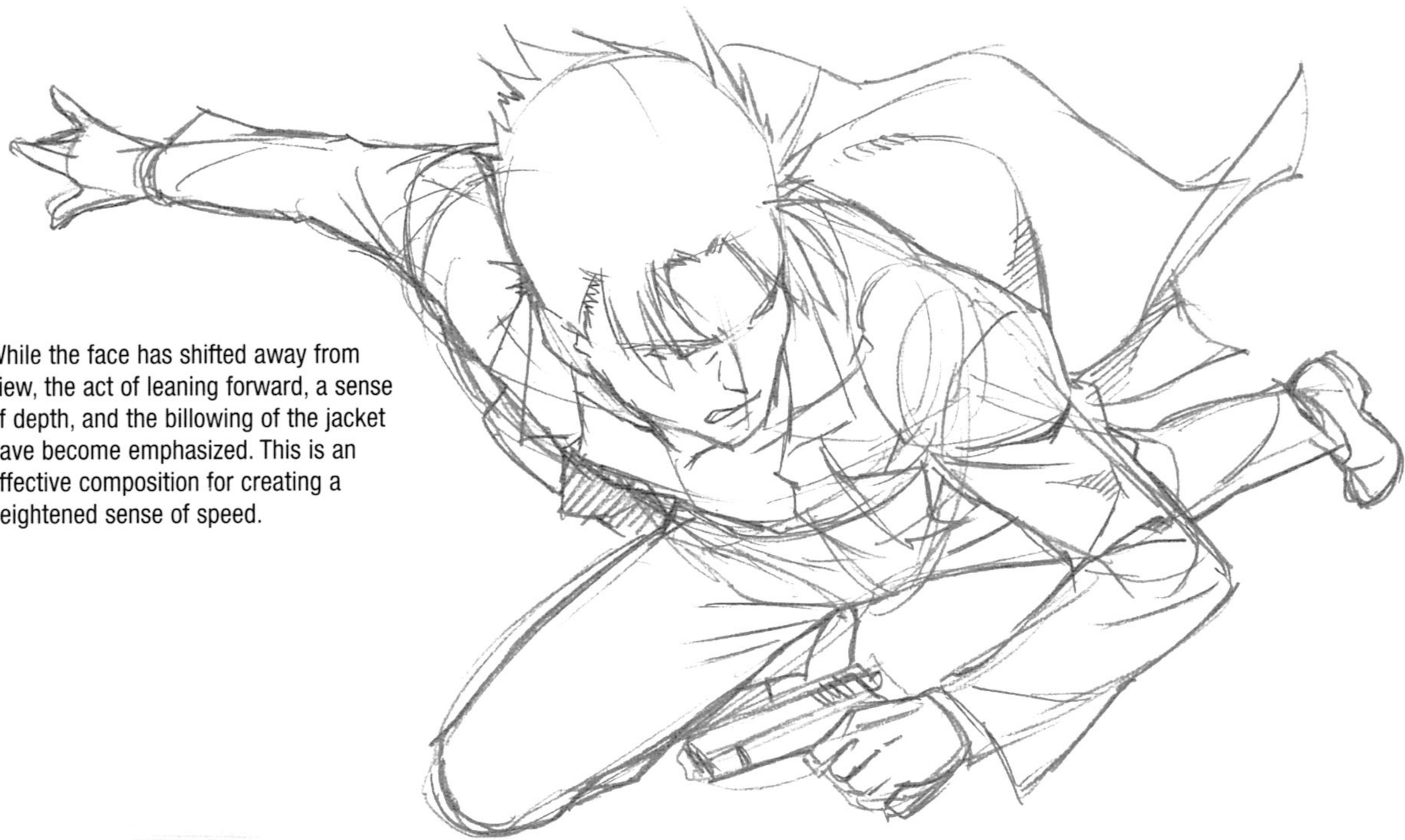
Converting to a Low Angle
Composition: Low, Left Angle



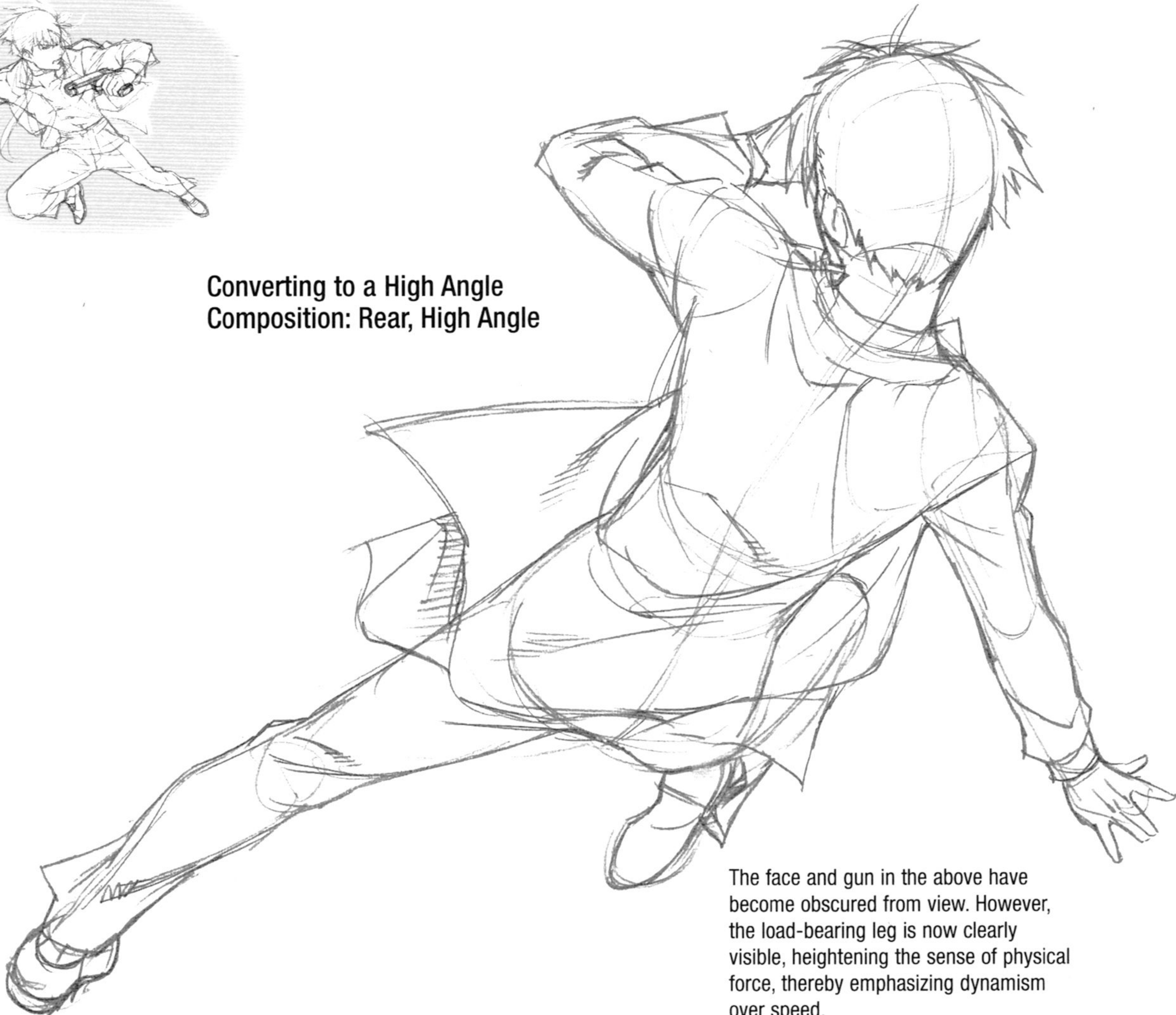
The above is composed from an angle that brings the face clearly into view. The torso shifts to face sideways. Giving a clear view of the face creates a feeling of high drama.

**Converting to a High Angle
Composition: Left, High Angle**

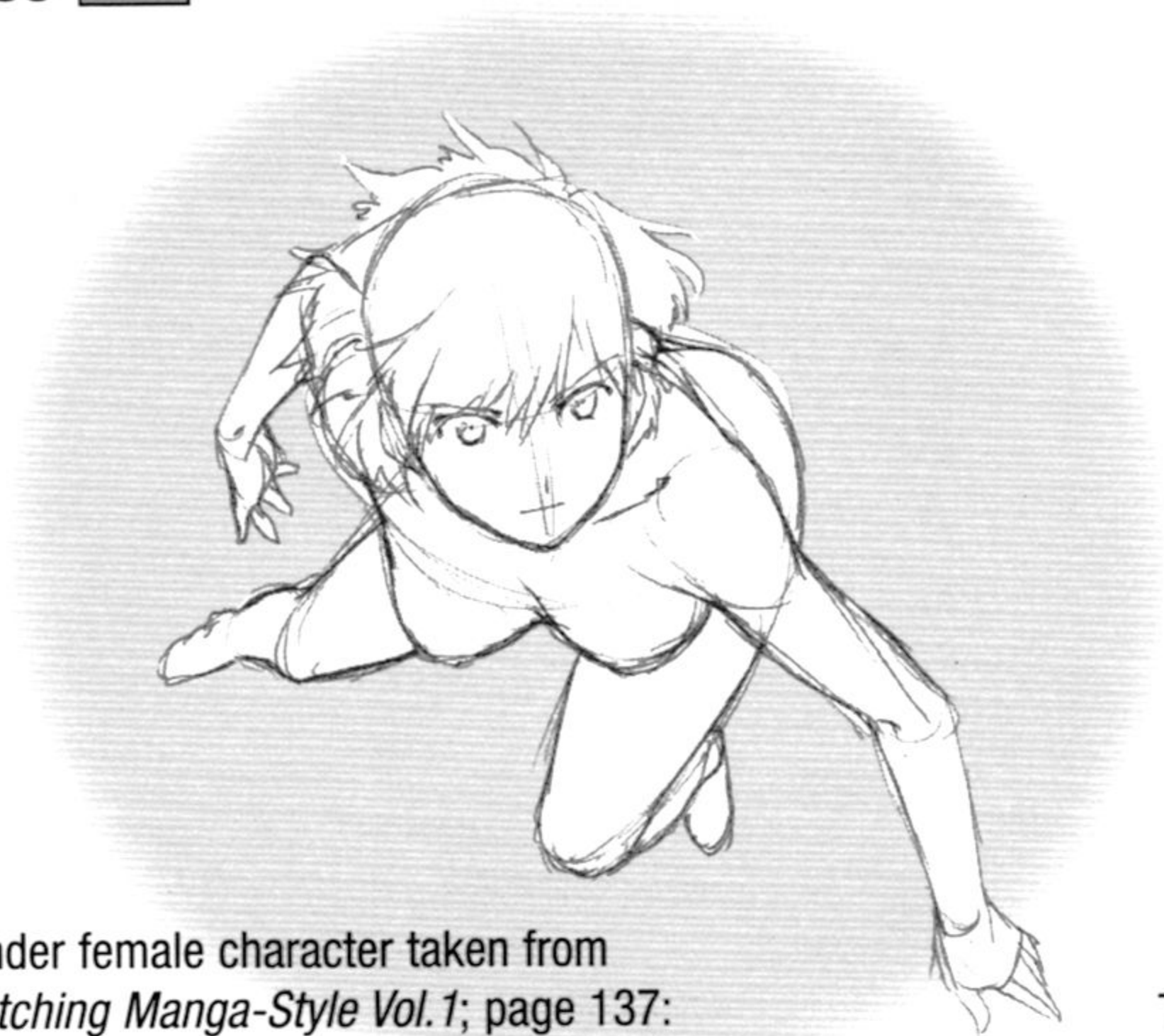
While the face has shifted away from view, the act of leaning forward, a sense of depth, and the billowing of the jacket have become emphasized. This is an effective composition for creating a heightened sense of speed.



**Converting to a High Angle
Composition: Rear, High Angle**



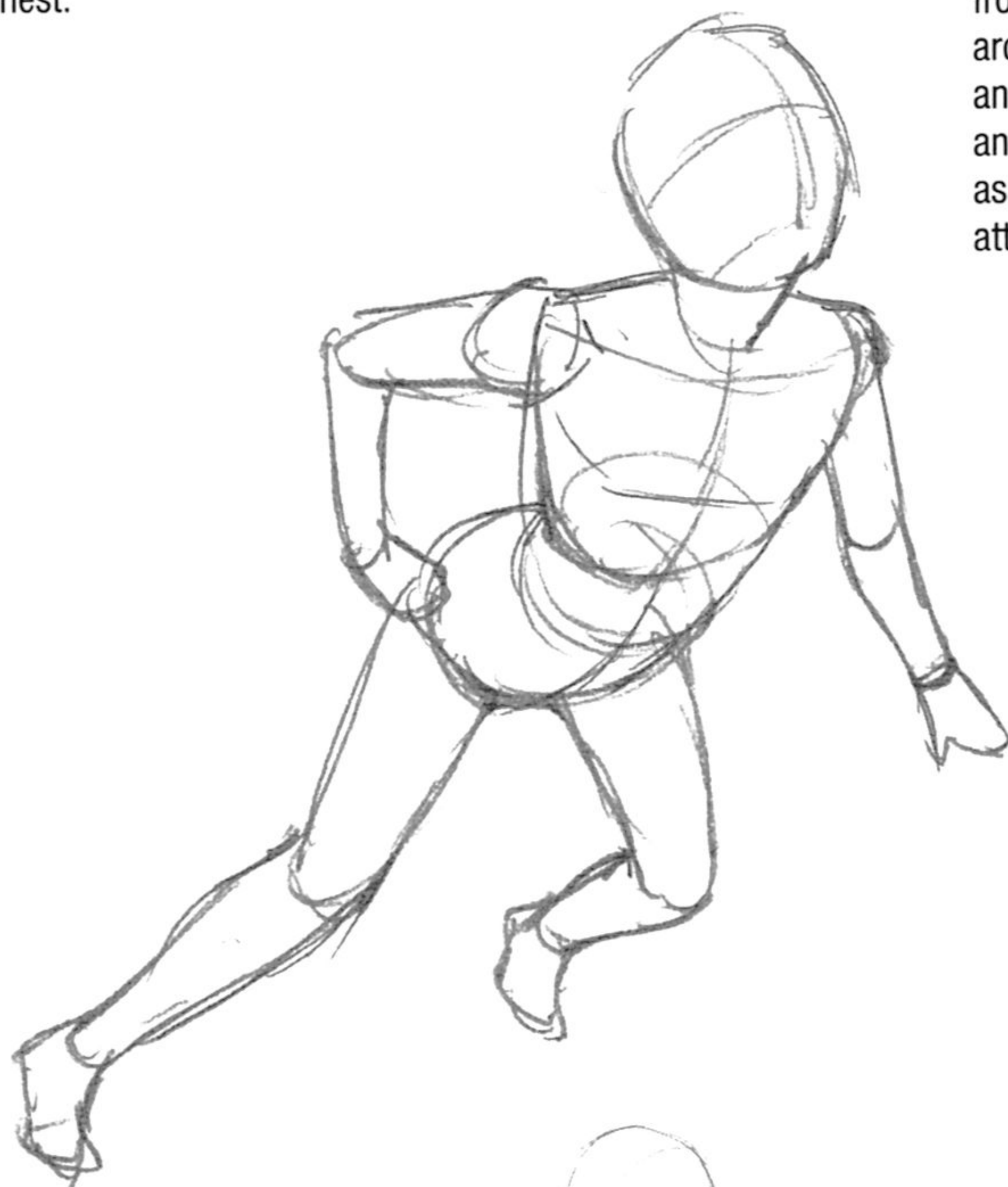
The face and gun in the above have become obscured from view. However, the load-bearing leg is now clearly visible, heightening the sense of physical force, thereby emphasizing dynamism over speed.



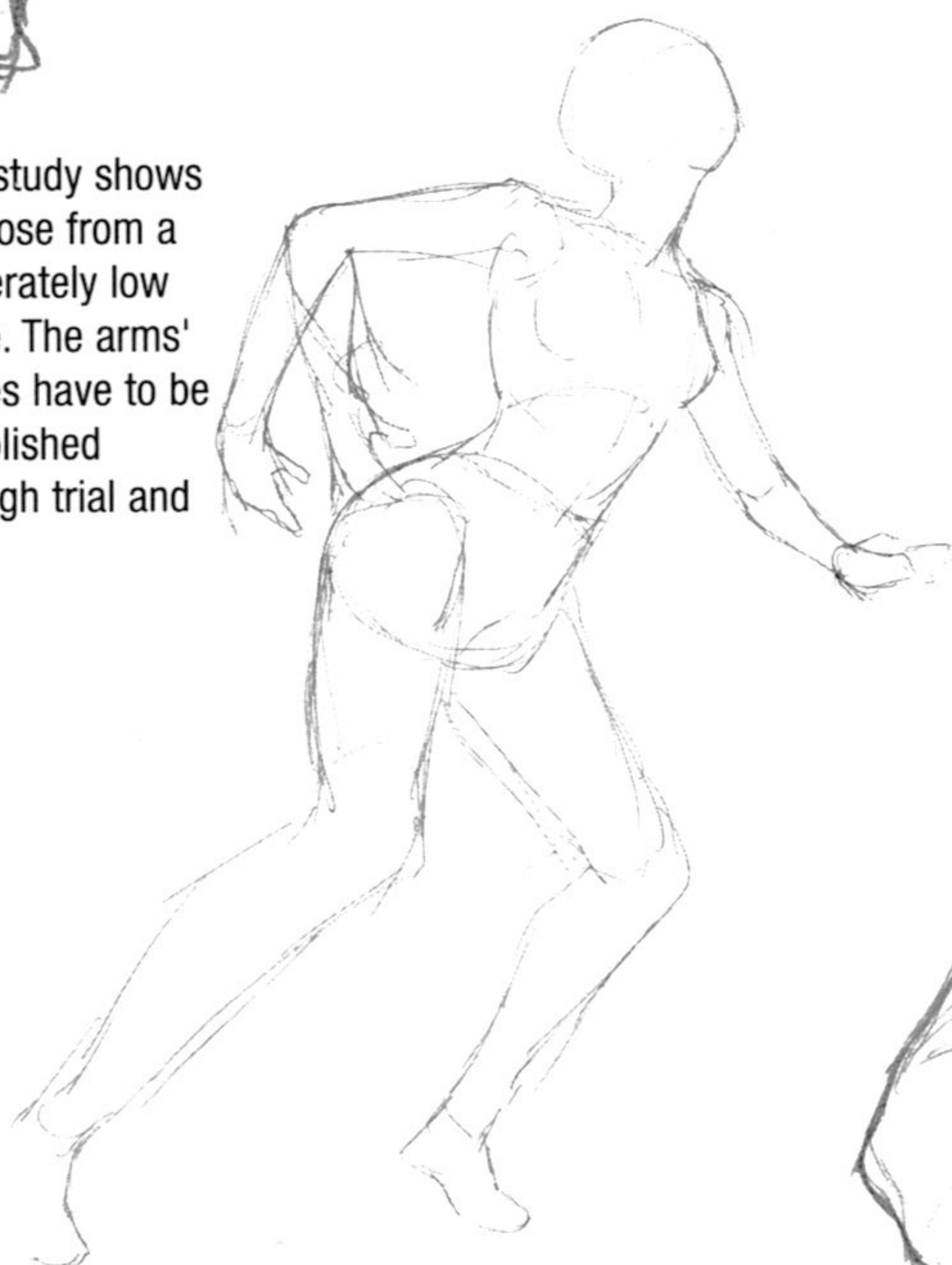
Slender female character taken from *Sketching Manga-Style Vol. 1*; page 137: This pose offers a flattering view of the chest.



This page shows several studies of the pose, examining from a variety of angles the arc of the torso, the directions and angles of the head, arms, and legs, and various other aspects of the original attractive pose.



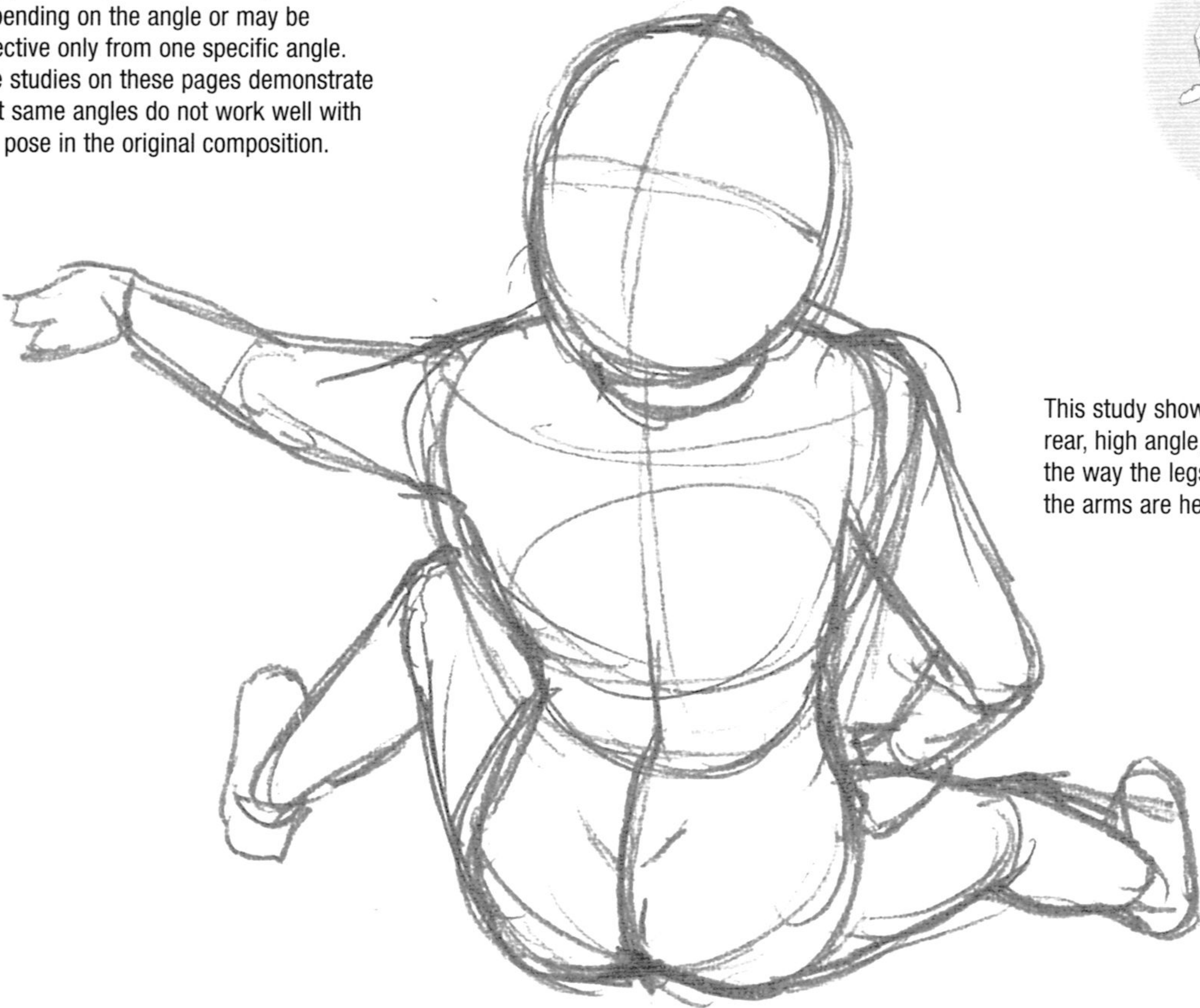
This study shows the pose from a moderately low angle. The arms' angles have to be established through trial and error.



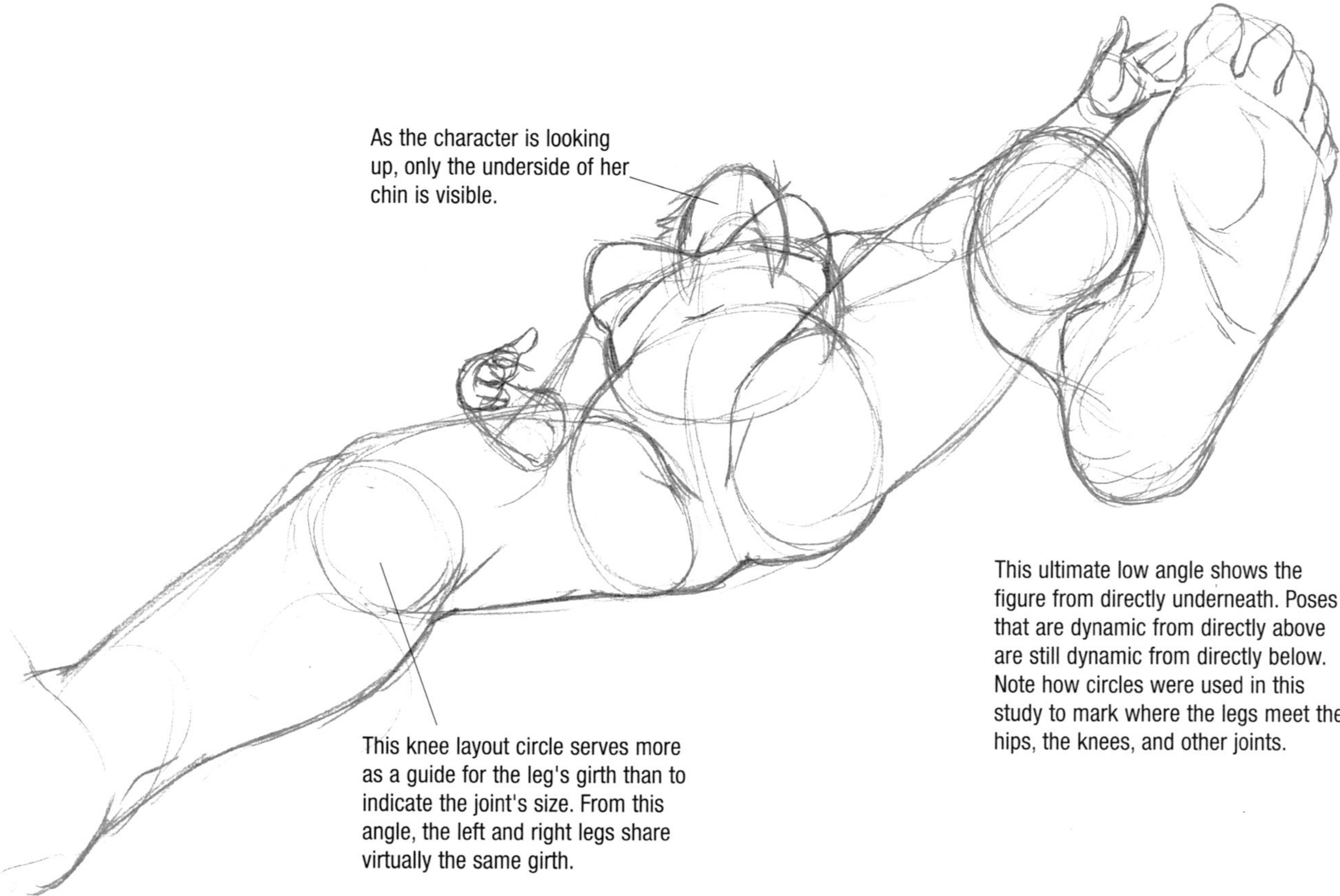
This study was drawn with the intention of clarifying the pose of the original composition while giving it form from a low angle.

Rear, High Angle Study, Overhead Study, Etc.

Key poses may either look impressive depending on the angle or may be effective only from one specific angle. The studies on these pages demonstrate that same angles do not work well with the pose in the original composition.



This study shows the character from a rear, high angle, clarifying her posture, the way the legs are spread, and how the arms are held.



As the character is looking up, only the underside of her chin is visible.

This knee layout circle serves more as a guide for the leg's girth than to indicate the joint's size. From this angle, the left and right legs share virtually the same girth.

This ultimate low angle shows the figure from directly underneath. Poses that are dynamic from directly above are still dynamic from directly below. Note how circles were used in this study to mark where the legs meet the hips, the knees, and other joints.

Converting to a Low Angle Composition: Rear, Low Angle

Angles that accentuate the buttocks work effectively with poses where the posterior juts out.



While the motion of the original composition is lost from this angle, it does create a dramatic composition.



La Maja Desnuda ("The Nude Maja"; ca. 1797-1800)
by Francisco de Goya
(In the collection of the Museo del Prado)

La Maja Desnuda, one of Goya's most recognized works, is commonly used as an example of a posed nude woman. With assorted nude images, glossy centerfolds and similar images saturating today's media, viewing Goya's masterpiece as a small, black-and-white reproduction makes it seem flat, while the pose strikes us as clichéd. However, if we attempt to draw or paint it ourselves, we discover meticulously calculated curved contours artfully reflecting the supple flesh, masterful technique used to portray three-dimensionality within a simple pose, and evidence of other sophisticated technical skill and portrayal so that we are overwhelmed by this ultimate expression of physical feminine beauty.

These next few pages show Goya's nude from a variety of comprehensible angles.



This sketch shows the nude woman viewed from a low angle around her knees. The portrayal of the knees contrasts with the body's suppleness.



This moderately high, left angle composition draws attention to the nude woman's gentle, feminine curves.



Retaining the Ambiance of the Face

The drawing below reflects the distinctive characteristics of the position of the bangs, the eyes, and the bridge of the nose.





This angle from the right side offers view of the contour extending from the back to the posterior, which is not visible in the original Goya painting. The form of this contour can be inferred from the chest and belly's contours, which are visible in the original. The undulating exterior contours were carefully rendered, while maintaining awareness of the voluptuous, soft flesh.



Stylization for Use in *Manga*



The artist conveys the pleasure in a work of *manga* to the reader by exaggerating the characters' actions and emotions. A movement or facial expression that is implausible for a real human being merely constitutes just one of many common performances for a *manga* character.

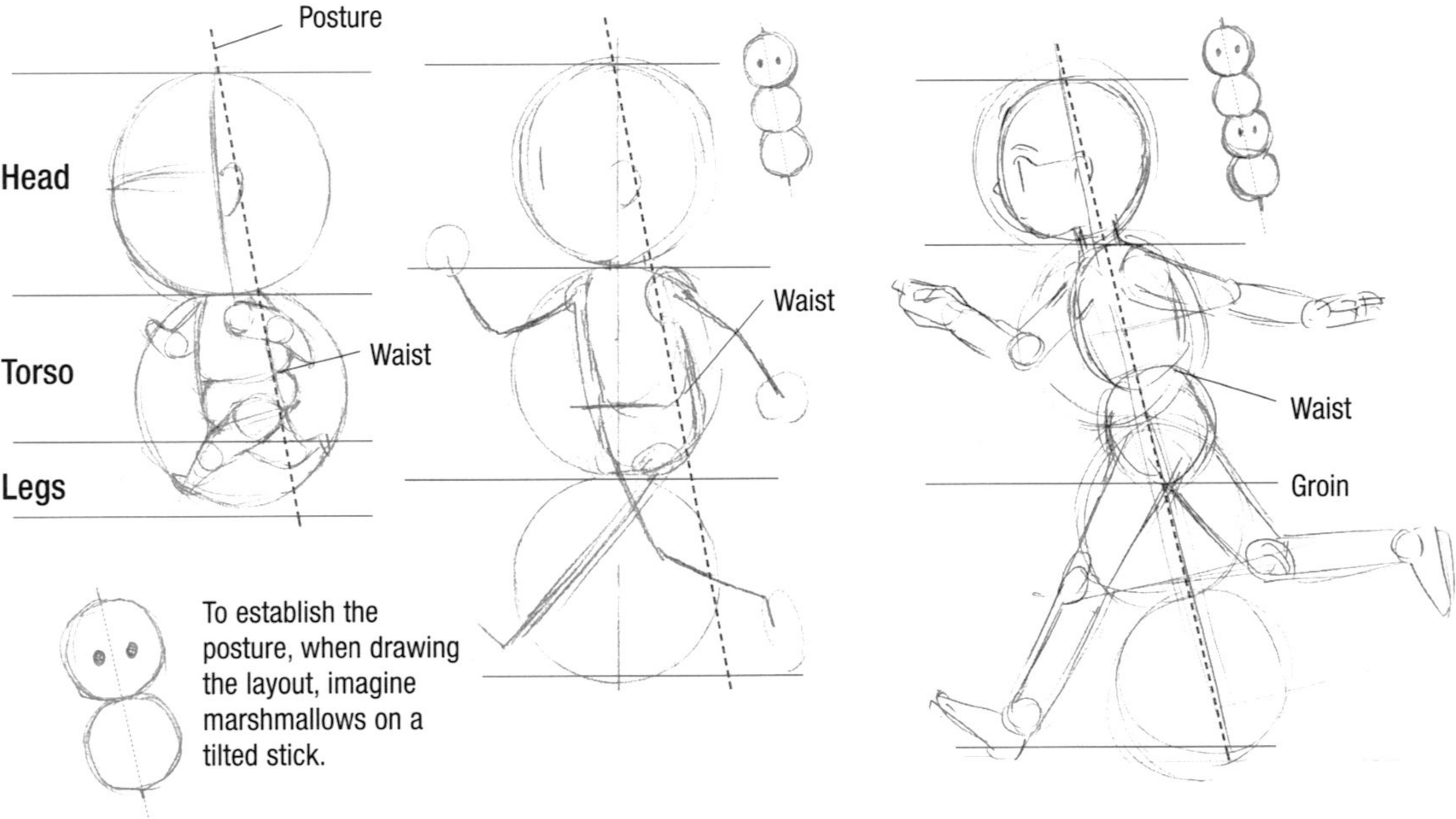
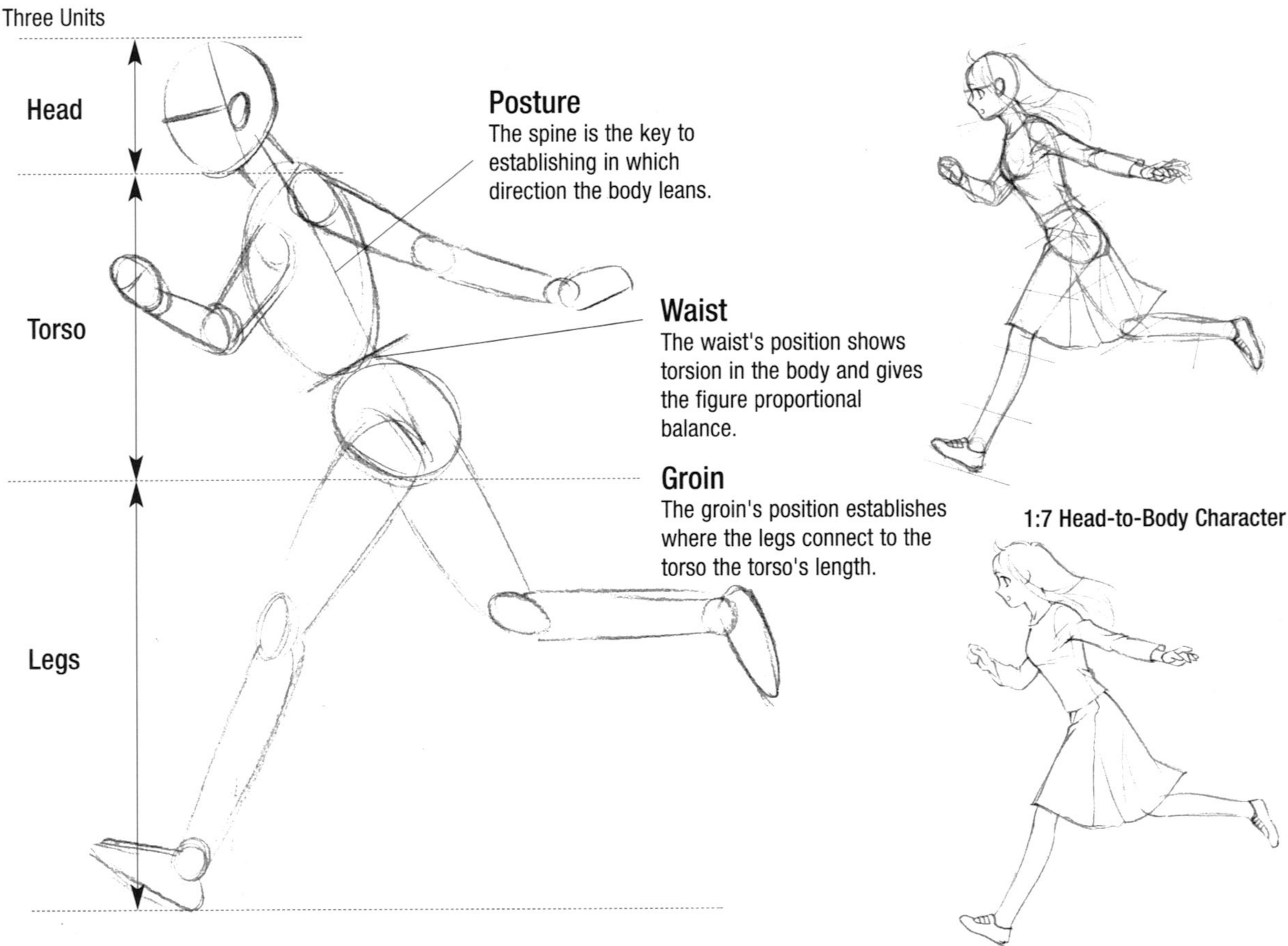
Yet, often what the artist considers an "exaggeration" when drawing does not appear to be an exaggeration at all by the reader. In actuality, there are aspects of exaggerated portrayal or, in other words, aspects of full-on stylized portrayal of a character that are difficult to learn solely from drawing a standard, "attractive" character.

The essentials of extreme character stylization may be learned through drawing super-deformed *chibi* characters in action and through *chibi* character portrayal, given that *chibis* are in actual fact characters drawn using stylized proportions. Mastering the stylization of *chibi* character action and emotion will also significantly improve your standard "attractive" character portrayal.

This chapter covers stylized portrayal, focusing on *chibi* characters.

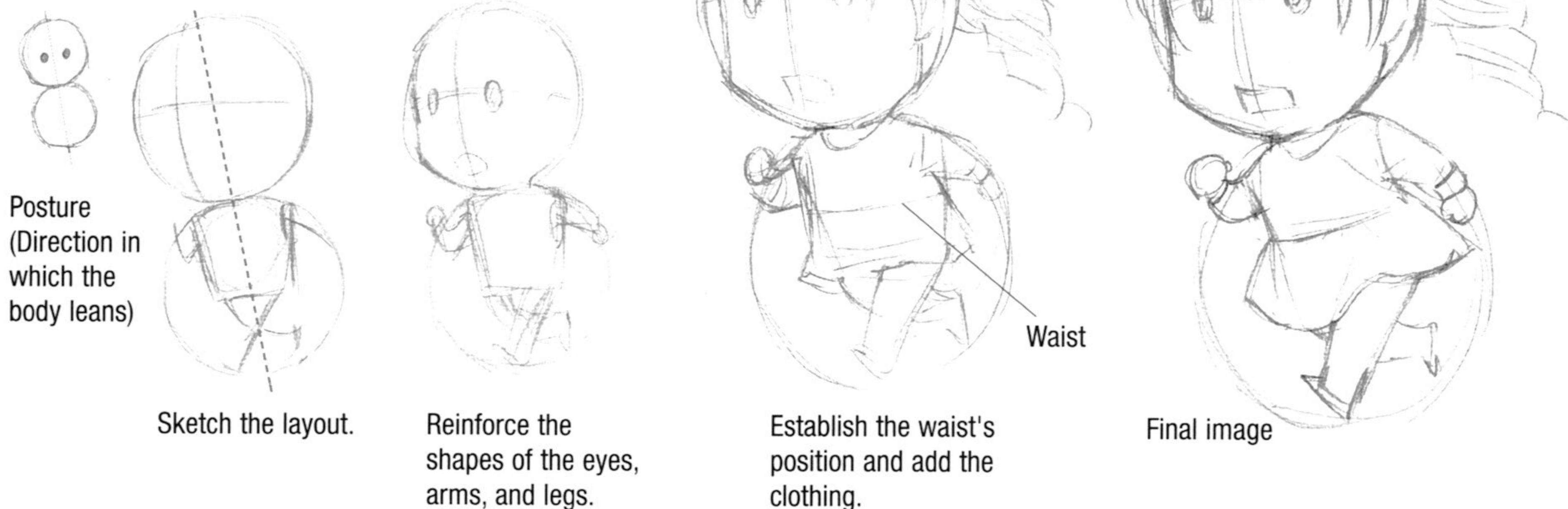
Three Elements in Portraying Motion

- 1. The full figure should be divided into three units: the head, the torso, and the legs.
- 2. Care should be taken in positioning the waist and the groin.
- 3. Awareness should be maintained of the posture and direction in which the body leans.

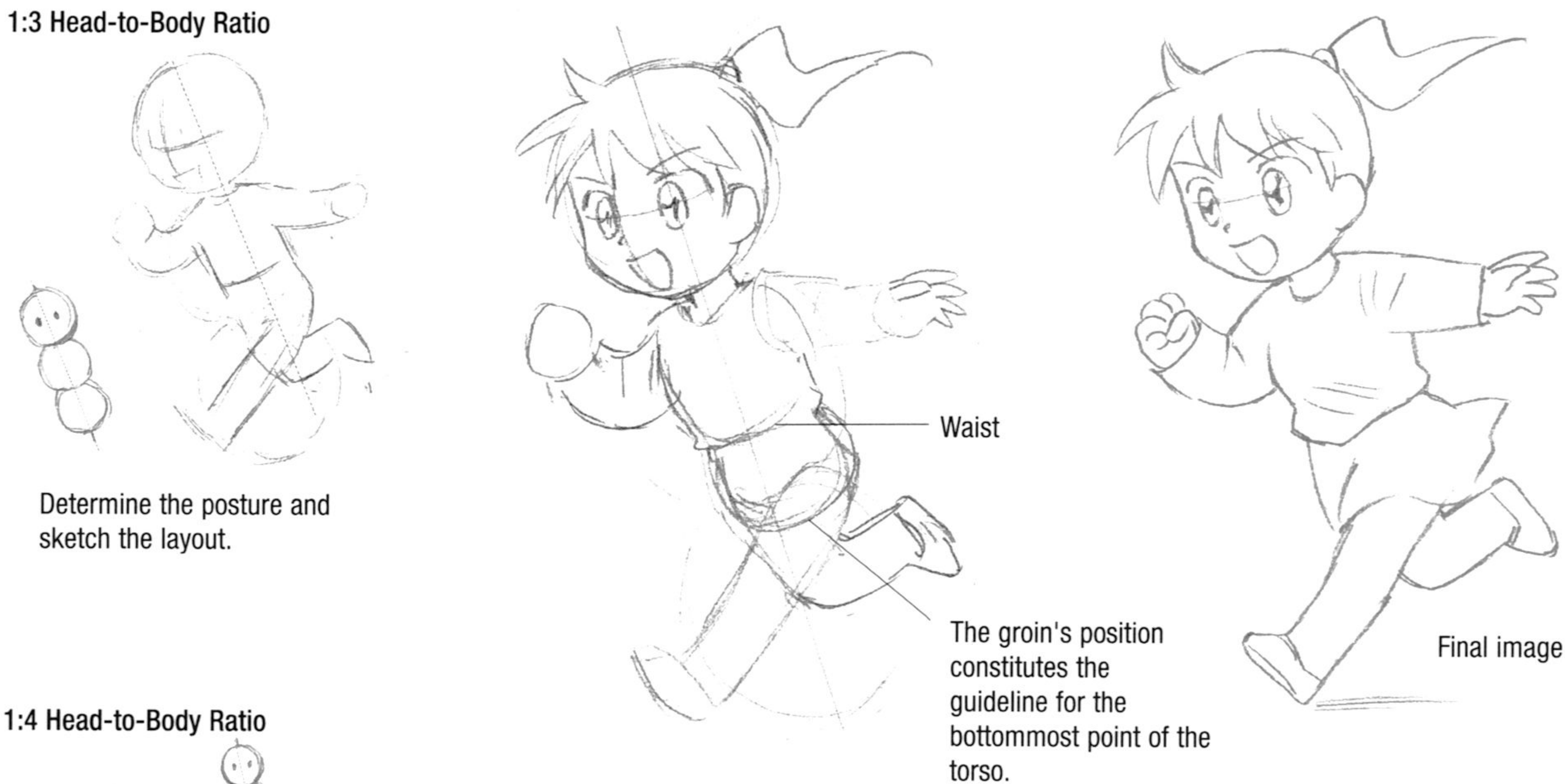


Steps in Drawing a Character Running

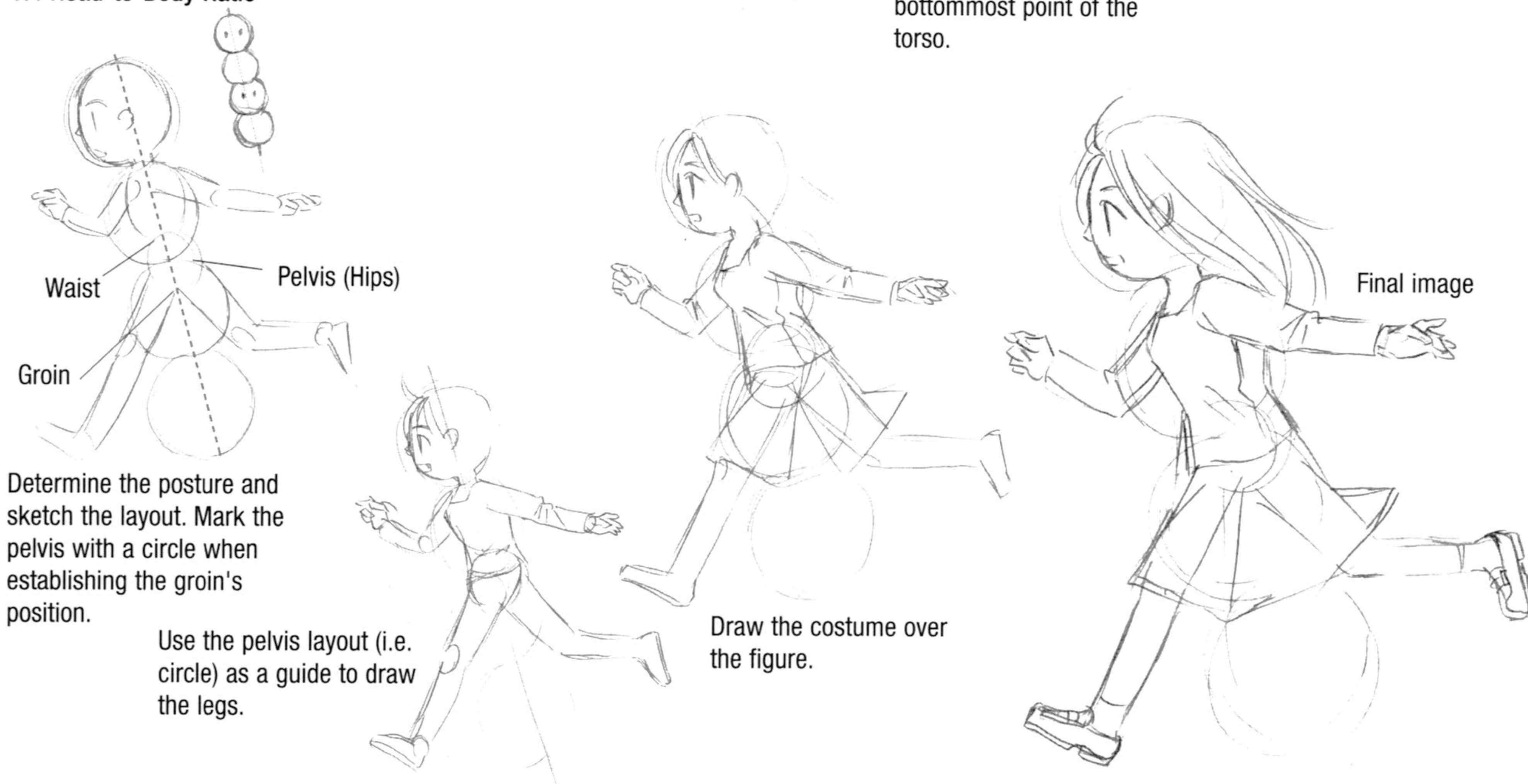
1:2 Head-to-Body Ratio



1:3 Head-to-Body Ratio



1:4 Head-to-Body Ratio

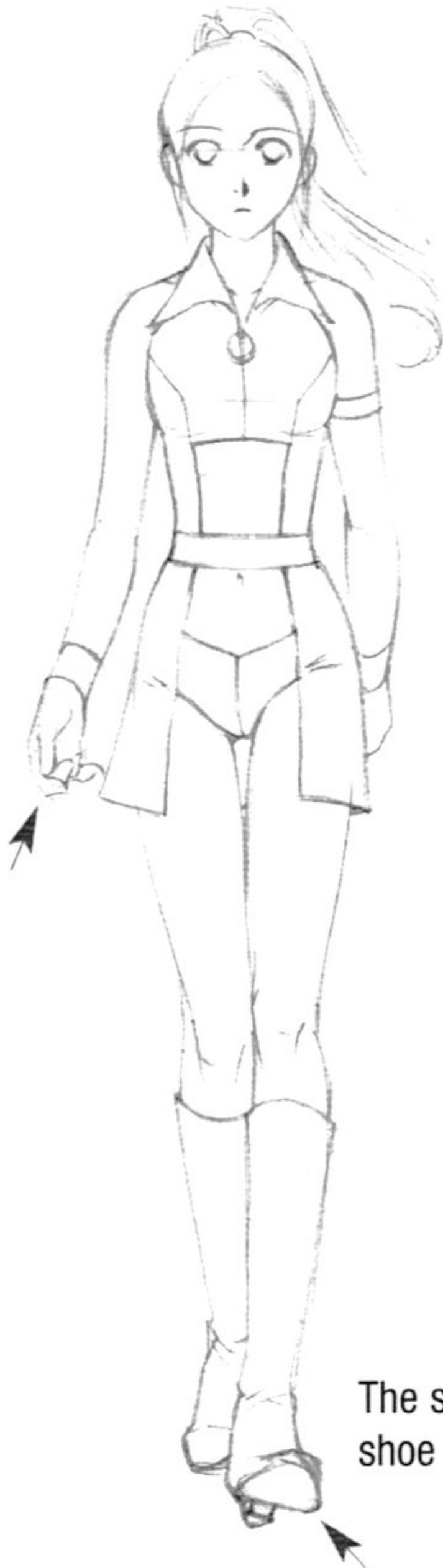


Drawing Common Actions

Draw stylized characters in motion, maintaining the identifying characteristics of that motion as demonstrated in attractively proportioned characters, whose movements are the closest to those of real people.

Walking (Front View)

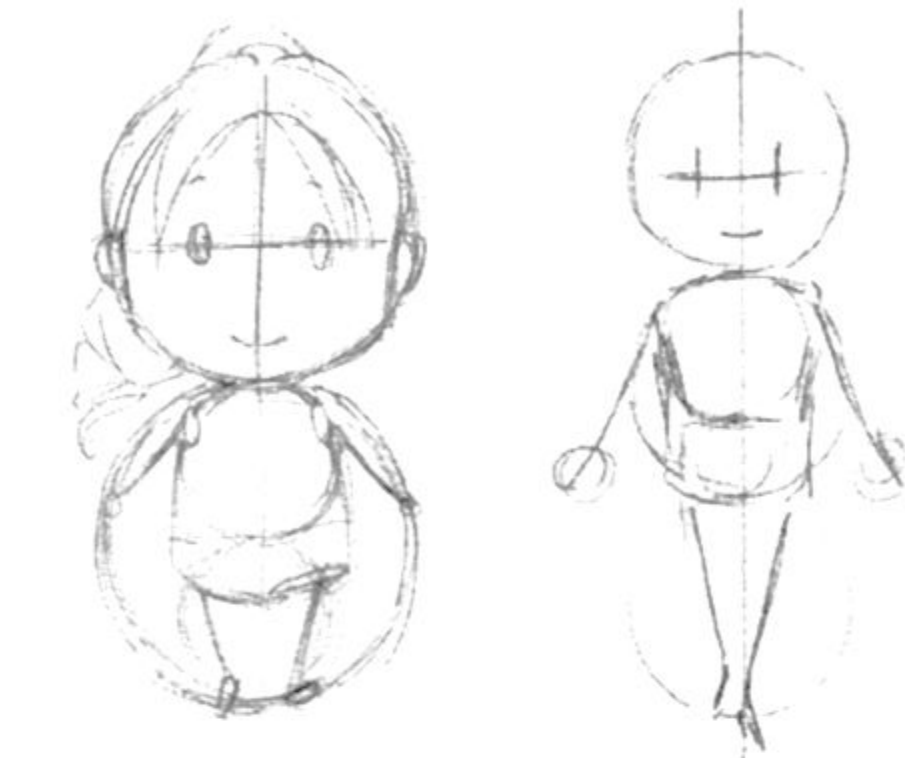
1:7 Head-to-Body Ratio



Draw the arms and legs in contraposition. The right arm and forward extending left leg constitute key points in the figure above.

Sketching the Body

The basics of drawing a character in motion are the same as drawing a figure. Establish where the waist and groin should be positioned based on the head-to-body ratio and then complete the drawing.



1:2 Head-to-Body Ratio



1:3 Head-to-Body Ratio



1:4 Head-to-Body Ratio



Drawing the Clothes

First sketch the character as a nude or dressed in a leotard and then draw over that any clothes you prefer.

1:2 Head-to-Body Ratio



1:3 Head-to-Body Ratio

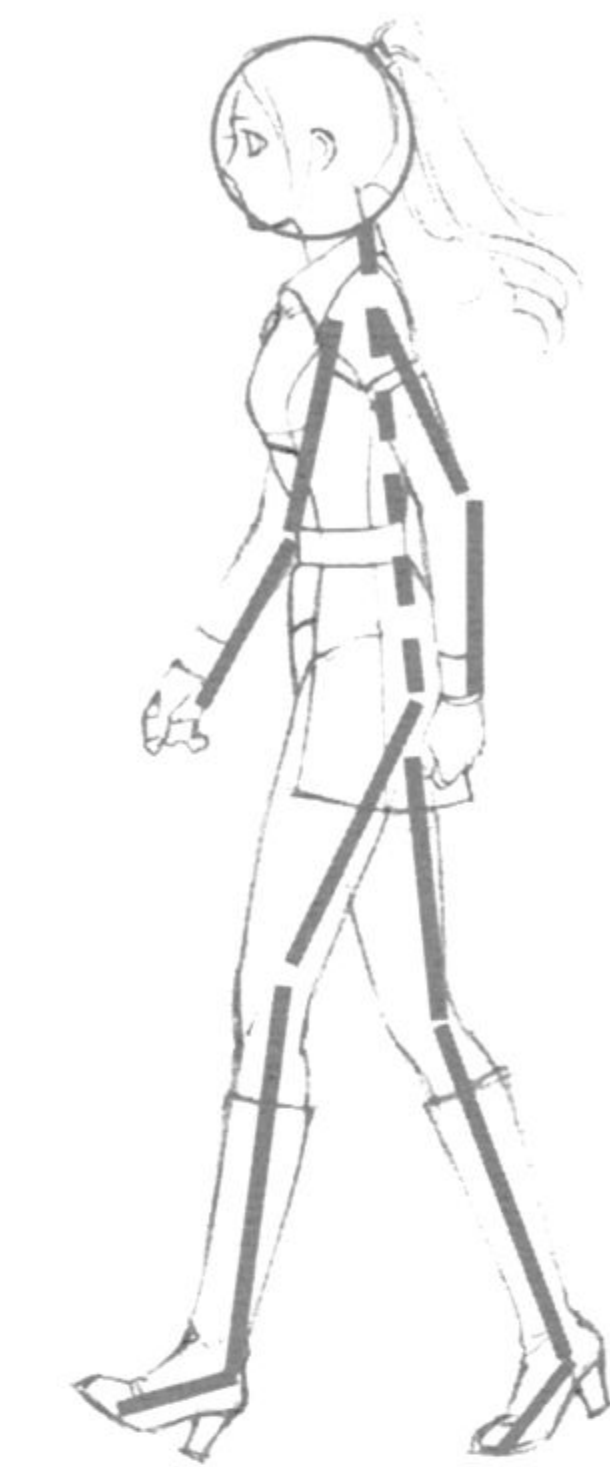


1:4 Head-to-Body Ratio



Drawing a character with *chibi* proportioning requires stylization. When sketching the initial layout, ensure that it reflects the distinguishing features of the original (i.e. attractively proportioned) character. When you sketch the layout, you will find that stylization allows your own artistic style to stand out in the *chibi*'s posture and limb proportioning.

1:7 Head-to-Body Ratio



Draw the posture, arms, and legs as a simple stick figure.

1:2 Head-to-Body Ratio



The 1:2 head-to-body ratio figure is walking erect. Simple curved lines have been used to render the subtly angled arms and legs.

1:3 Head-to-Body Ratio



This 1:3 head-to-body ratio figure leans forward slightly. The front foot extends forward in an exaggerated manner.

1:4 Head-to-Body Ratio



The 1:4 head-to-body ratio figure shares virtually the same posture as that of the original. However, bending in the arms and legs has been exaggerated.

The final images shown below reflect the posture and appearance of the limbs captured at the layout stage above. Stylization gives your characters' movements sparkle and vitality, so do not feel that you have to reproduce faithfully what you see on this page.

1:2 Head-to-Body Ratio



1:3 Head-to-Body Ratio

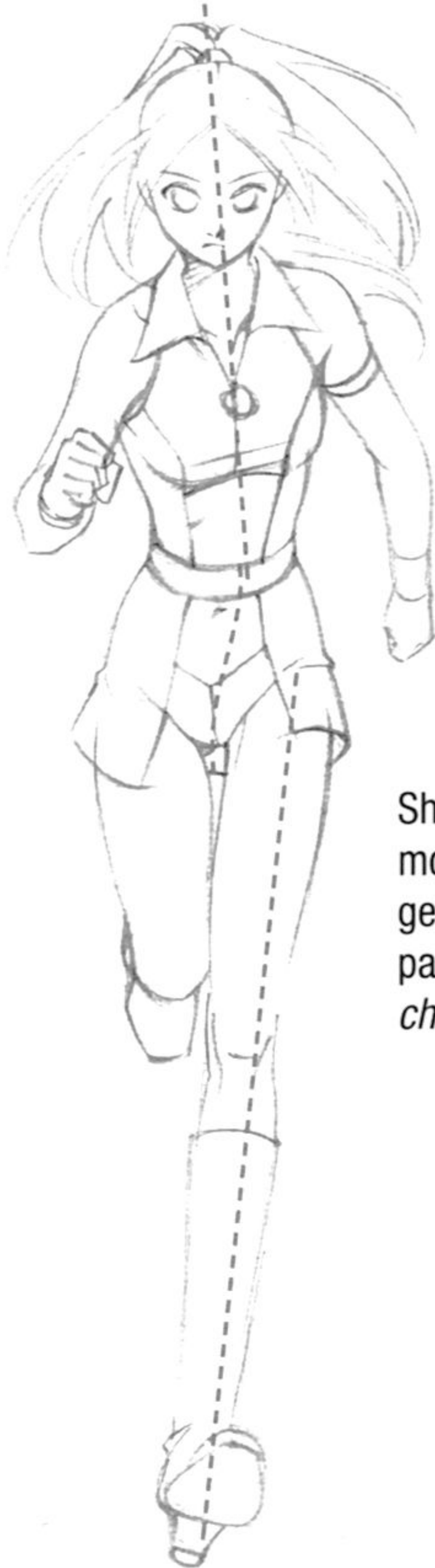


1:4 Head-to-Body Ratio

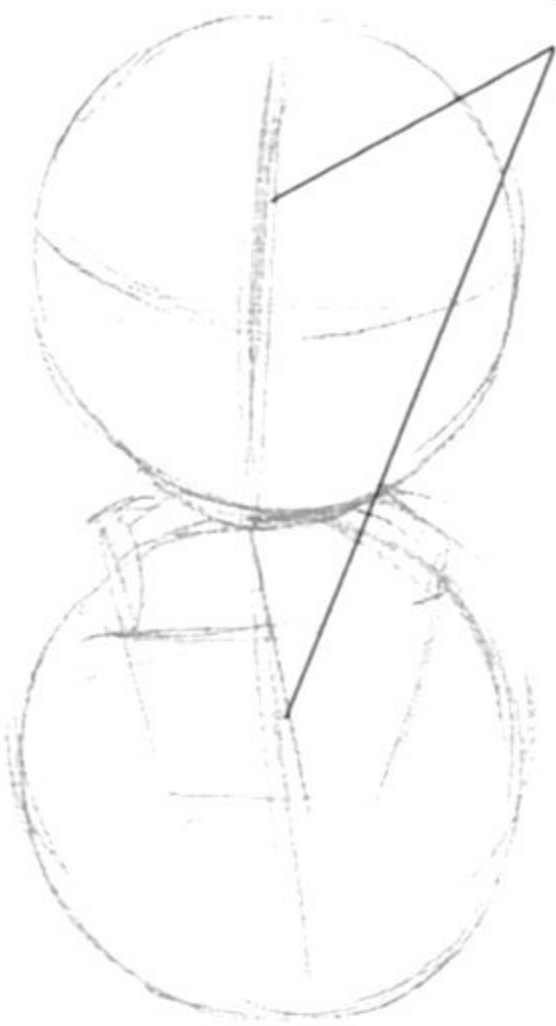


Running (Front View)

1:7 Head-to-Body Ratio



1:2 Head-to-Body Ratio



The centerline drawn through the head and body forms a sideways "V".



Dressed in a leotard



Dressed in the same costume as the model

Shifting the direction of the centerline as it moves from the head to the body generates a sense of movement. This is a particularly effective technique to use with *chibi* characters, who have small torsos.

Sketch layouts of the limbs and hair using the model as reference. This alone creates a sense of movement.

1:3 Head-to-Body Ratio



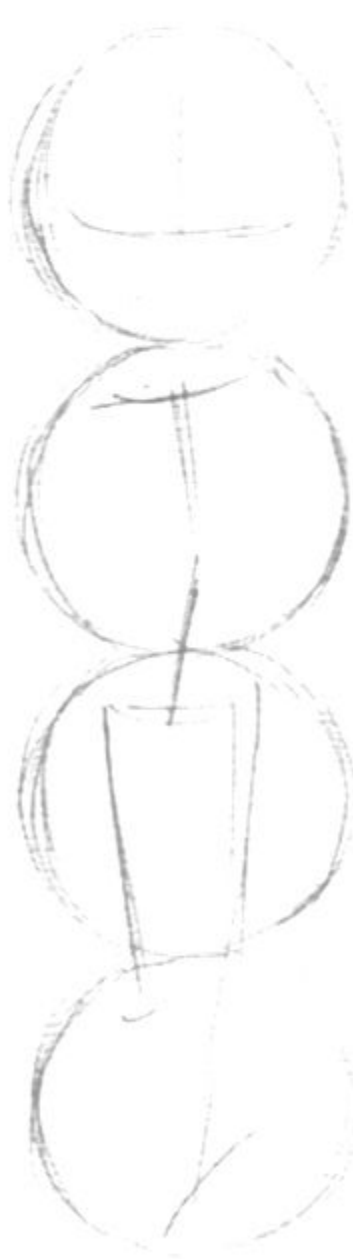
Draw the head, torso, and limbs in contraposition to generate a sense of running.



Note that while this figure wears an entirely new outfit, her arms and legs still move in the same manner, and her hair still falls in the same manner as the original.

In the model pictured above, the groin acts as a boundary where torsion shifts directions from the upper to lower body.

1:2 Head-to-Body Ratio



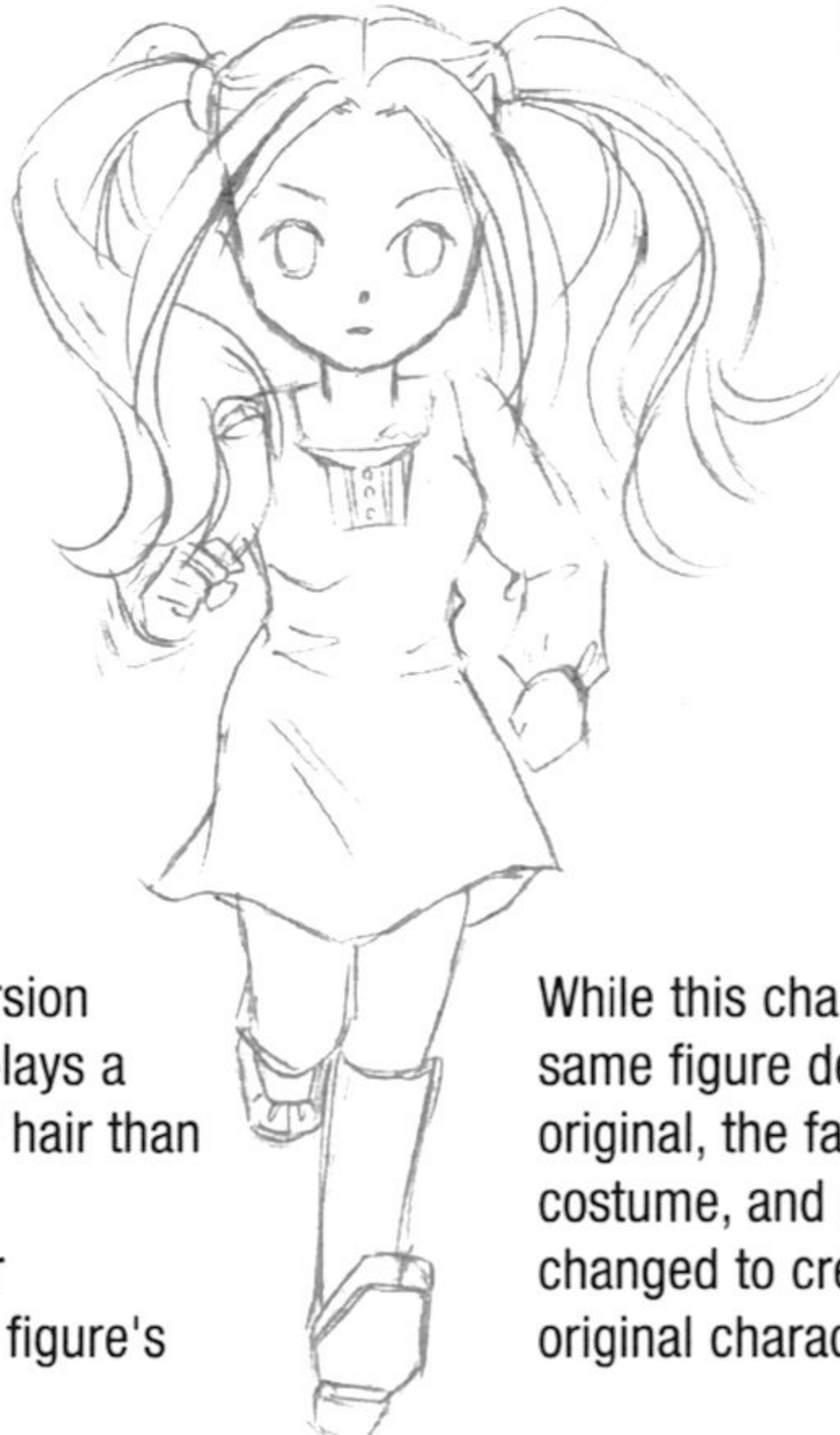
The layout adheres to the original model.



This figure sketch reflects the proportions of a 1:4 head-to-body ratio.



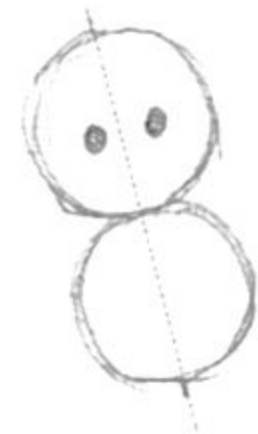
The 1:4 ratio version shown here displays a larger volume of hair than the original. The accentuated hair underscores the figure's overall adorable appearance.



While this character shares the same figure design as the original, the face, hairstyle, costume, and shoes were changed to create a new, original character.

Running (Profile View)

1:2 Head-to-Body Ratio



Try drawing two marshmallows on a tilted stick to create a forward leaning posture.

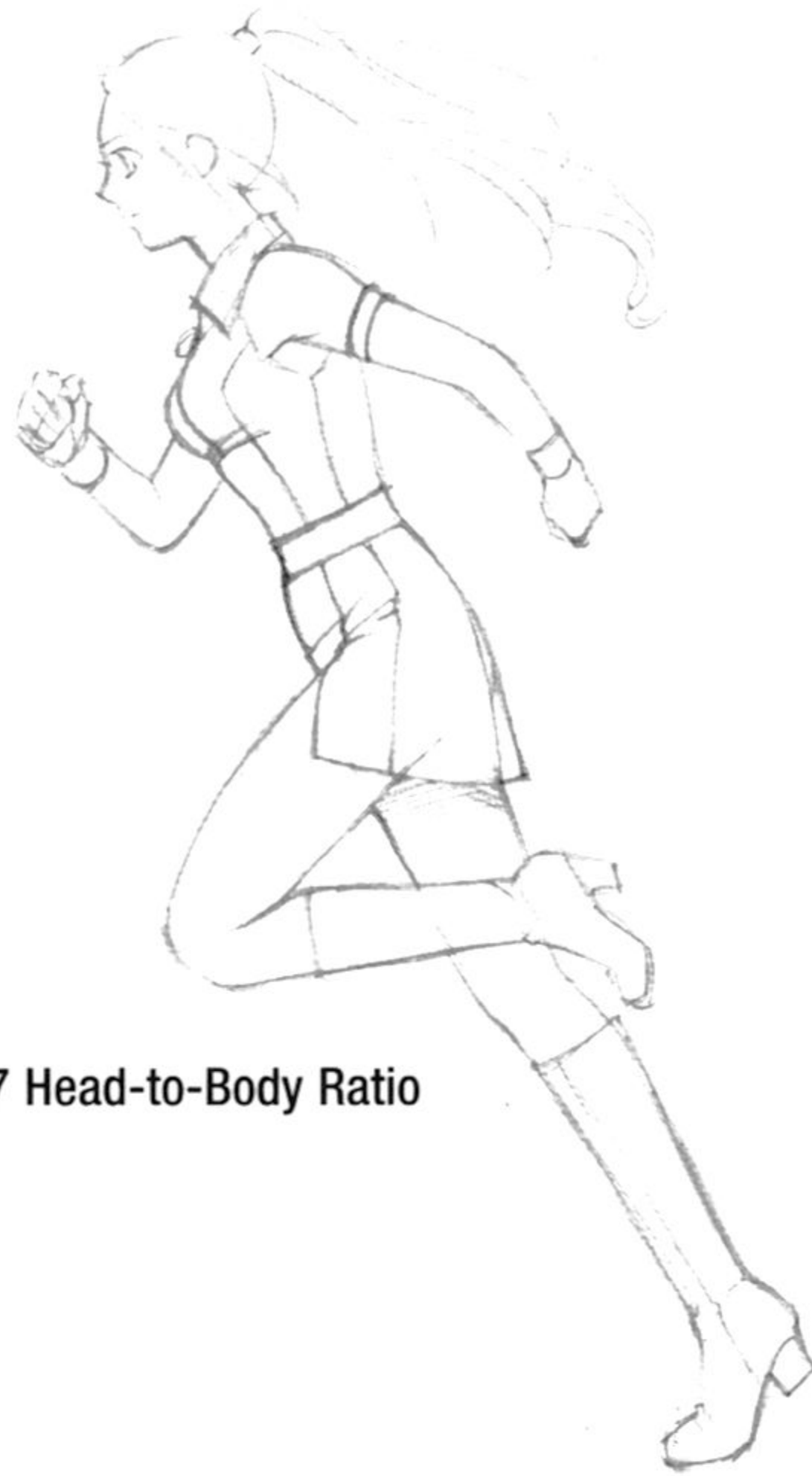


Figure Sketch



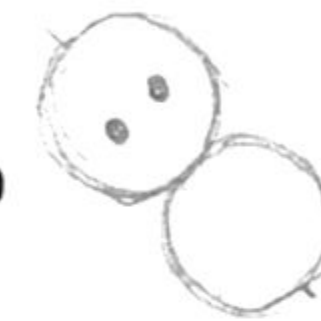
Final image

1:7 Head-to-Body Ratio



Add layouts for the arms and legs to the body layout.

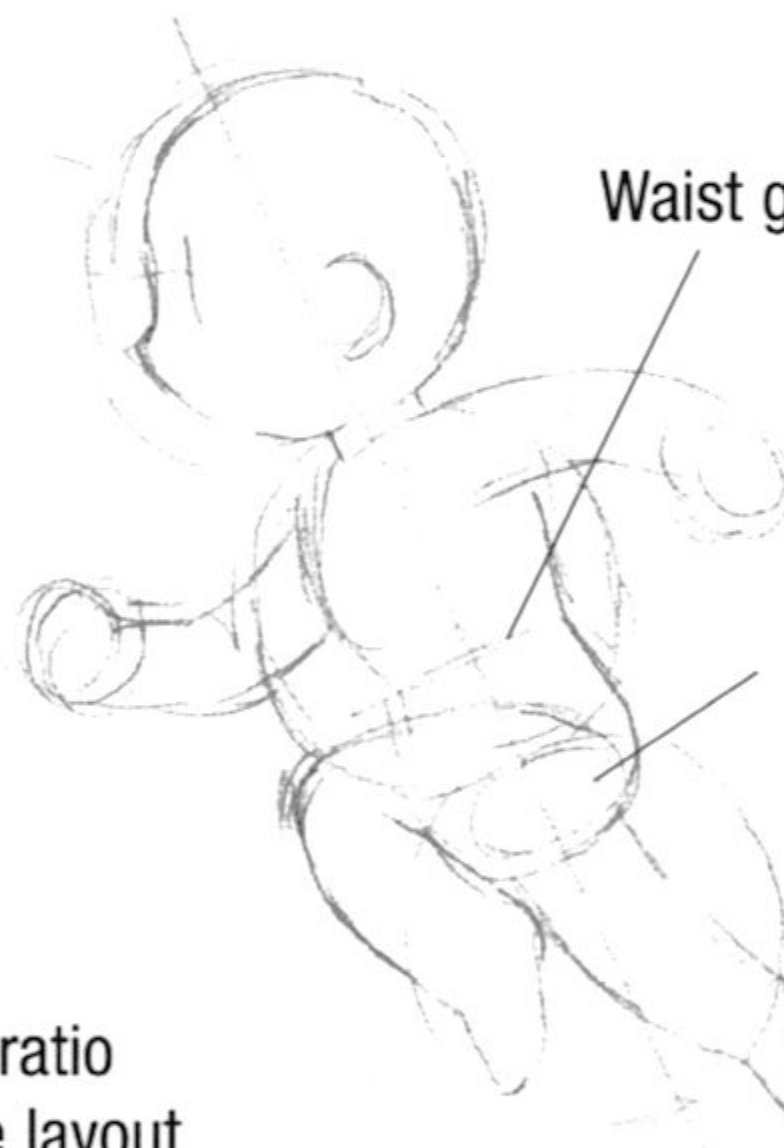
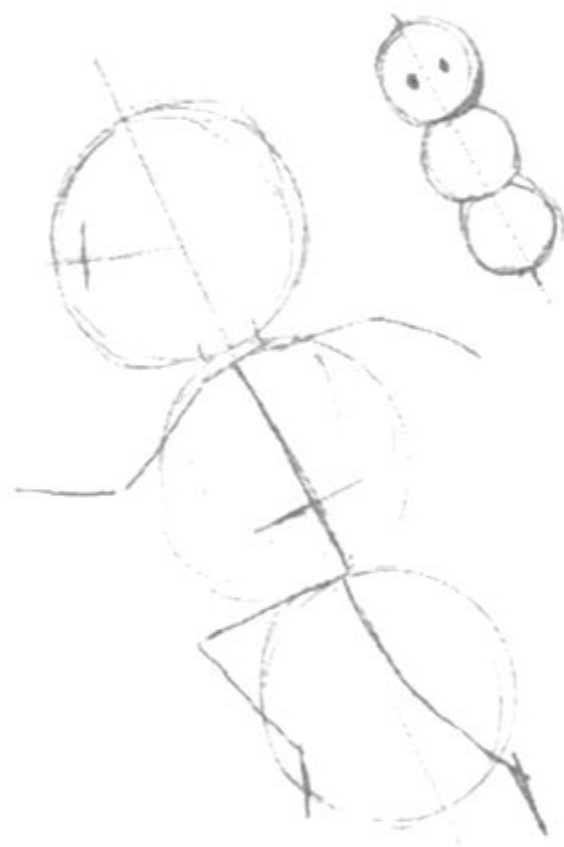
This line defines the bottommost point of the torso where it connects to the legs.



This shows the figure leaning at a 45(angle. Having the figure lean forward generates a sense of speed.

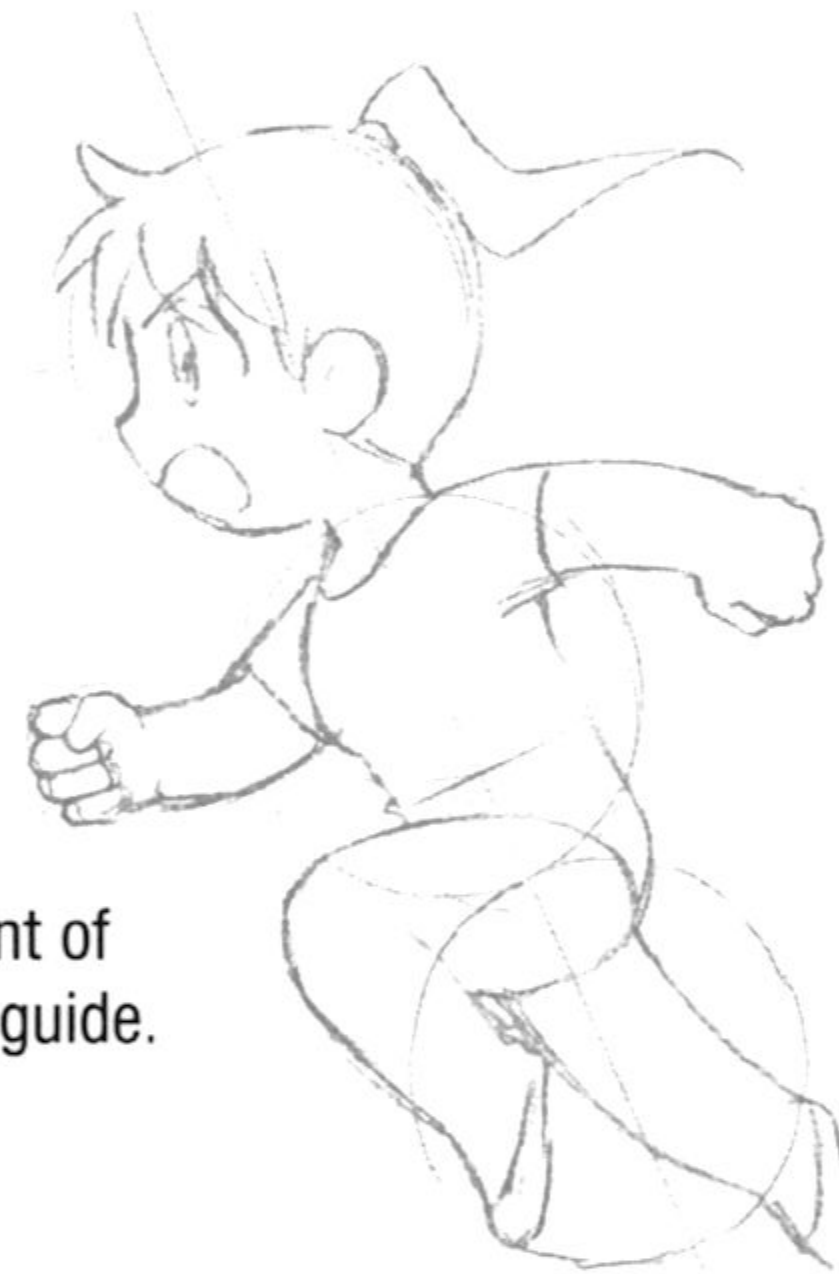


1:3 Head-to-Body Ratio



Waist guideline

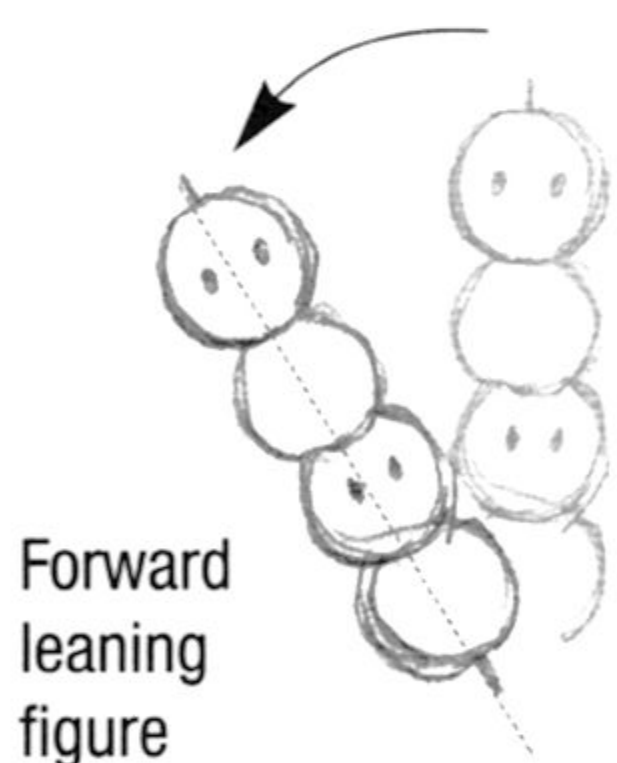
Draw the legs using the line denoting the lowermost point of the torso as a guide.



Final image

Use the proportions for a 1:3 ratio when sketching the full figure layout.

1:4 Head-to-Body Ratio

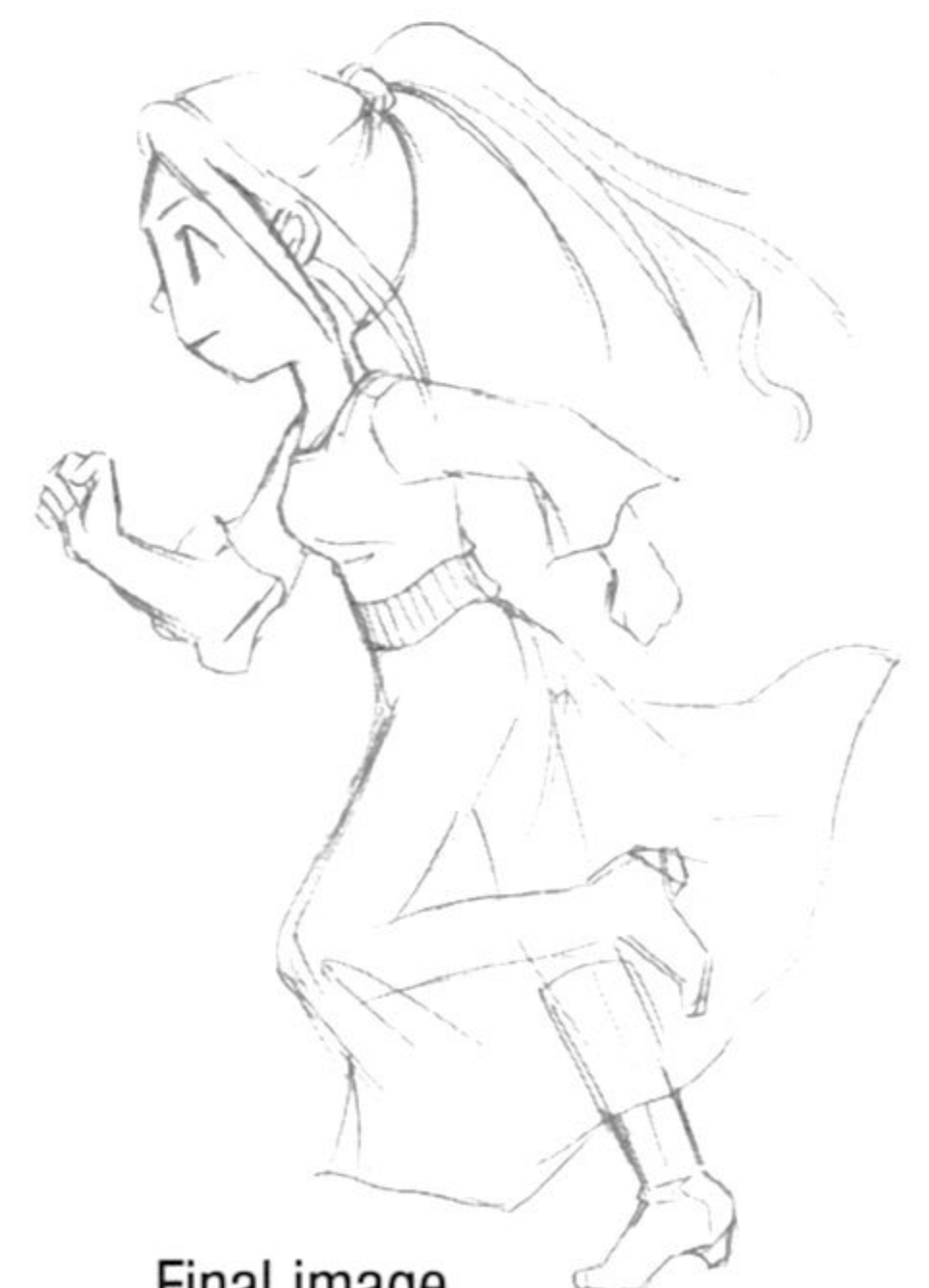
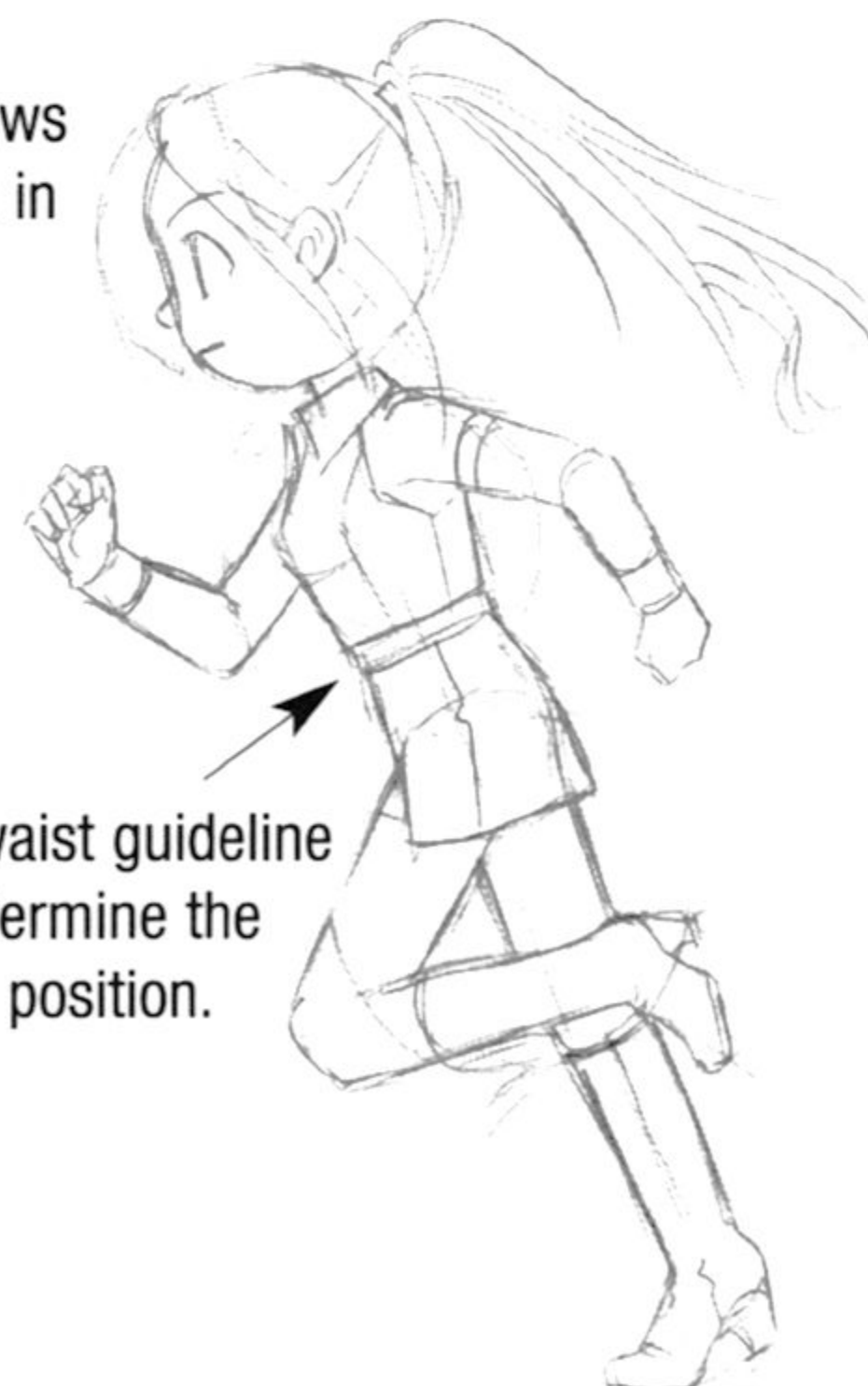


Forward leaning figure



This sketch shows the body drawn in units.

Use waist guideline to determine the belt's position.

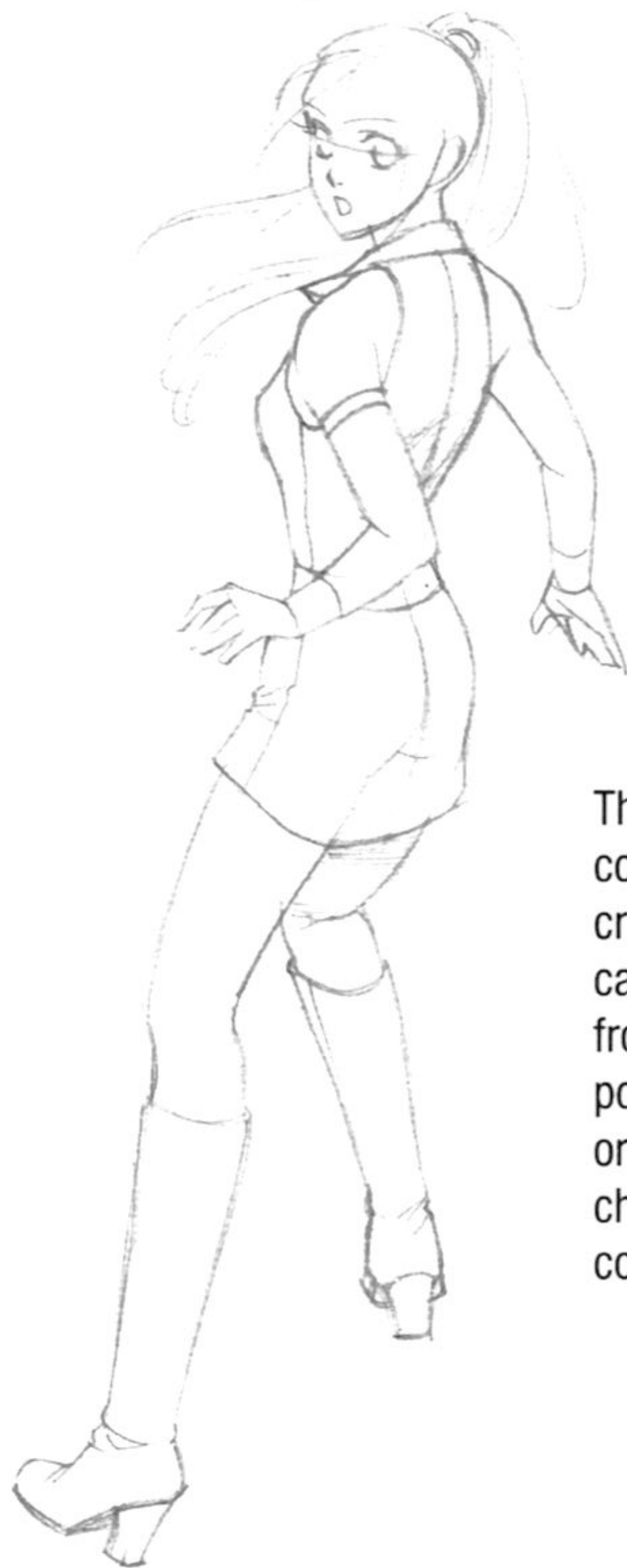


Final image

When drawing the full figure layout, pay attention to where you position the elbows and knees in order to proportion the arms and legs.

Looking Back (Full Figure)

1:7 Head-to-Body Ratio



1:2 Head-to-Body Ratio



1:3 Head-to-Body Ratio



1:4 Head-to-Body Ratio

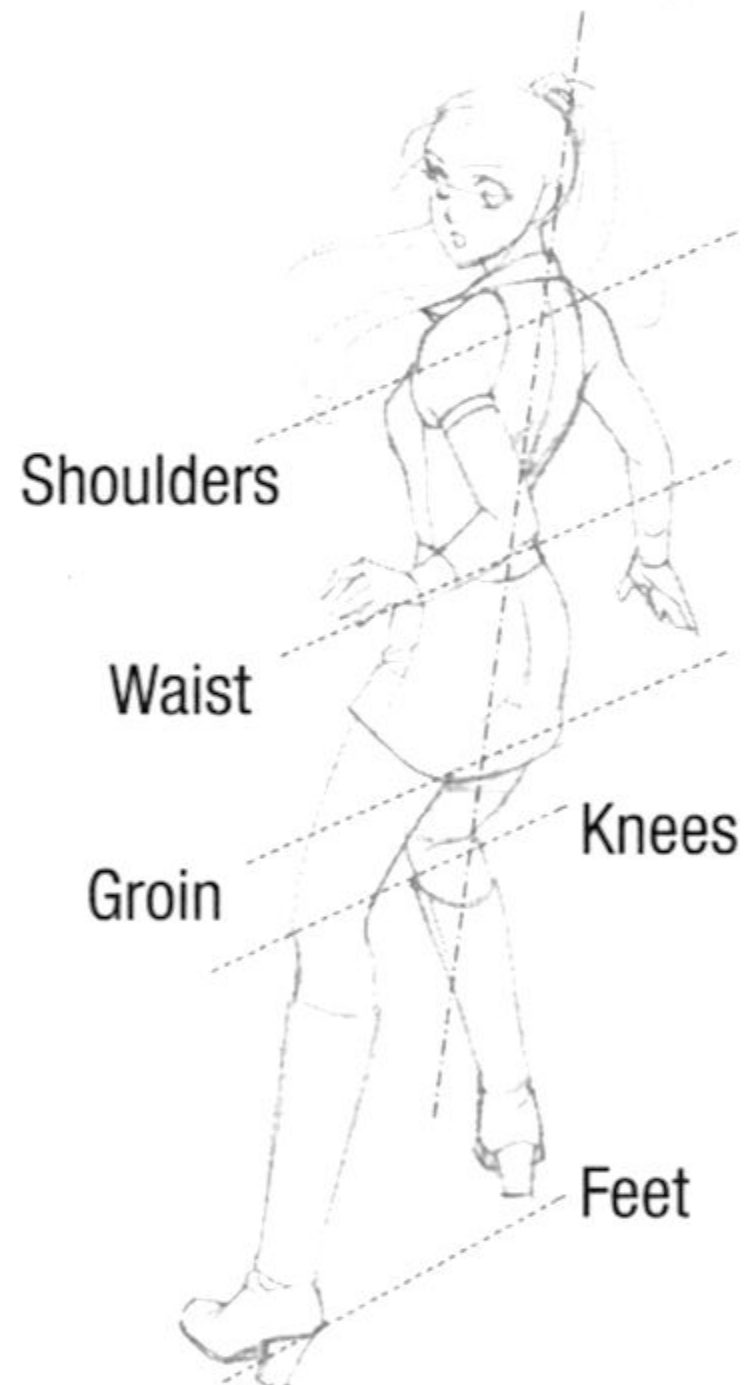


The positioning of the feet and angle of composition have been modified to create the above. A high angle would cause these short legs to disappear from view. Therefore, to retain the poses of the arms and legs seen in the original when drawing your own character, shift the angle of composition.

To reproduce the above, simplify the positioning of the feet and angle of composition.

1:3 Head-to-Body Ratio

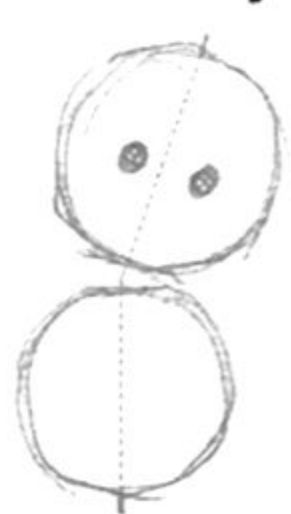
Posture (Angle of tilt)



When using a difficult angle of composition, such as a moderate high angle, draw guidelines for the shoulders, waist, groin, and feet as well as for the posture.

The trick to making the figure appear stably balanced is to draw the shoulders, waist, groin, and feet guidelines parallel to each other.

1:2 Head-to-Body Ratio



Tilting the head creates a sense of movement.



1:4 Head-to-Body Ratio



As with the 1:3 ratio figure, draw a layout and then flesh out the figure.

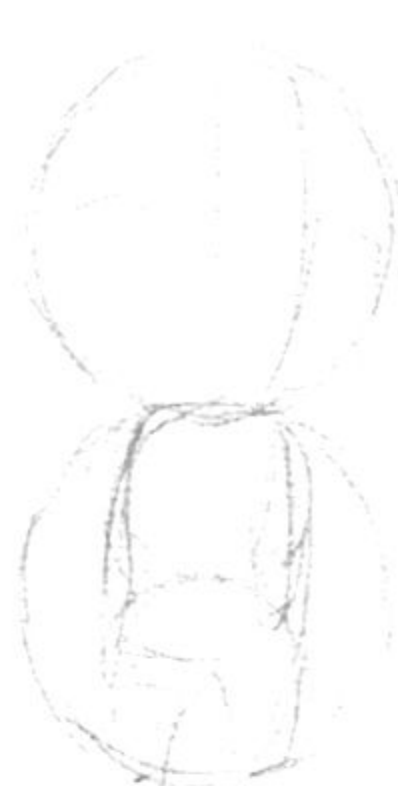


Looking Back (Bust Close-up)

1:7 Head-to-Body Ratio



1:2 Head-to-Body Ratio



The head-to-body ratio determines the figure's proportioning. Therefore, a layout of the character's full figure should be drawn initially even to produce just a bust close-up. This is because the width of the neck and shoulders alone suggest the actual head-to-body ratio to the viewer.

Draw the body from the shoulders down in a pose as needed.

1:3 Head-to-Body Ratio



Posture (Angle of tilt)



Draw the spine guideline at an angle to achieve a satisfying posture.

Draw the top of the neck and the load-bearing foot along the centerline.

This creates the illusion of the character standing while glancing back over her shoulder.

1:4 Head-to-Body Ratio



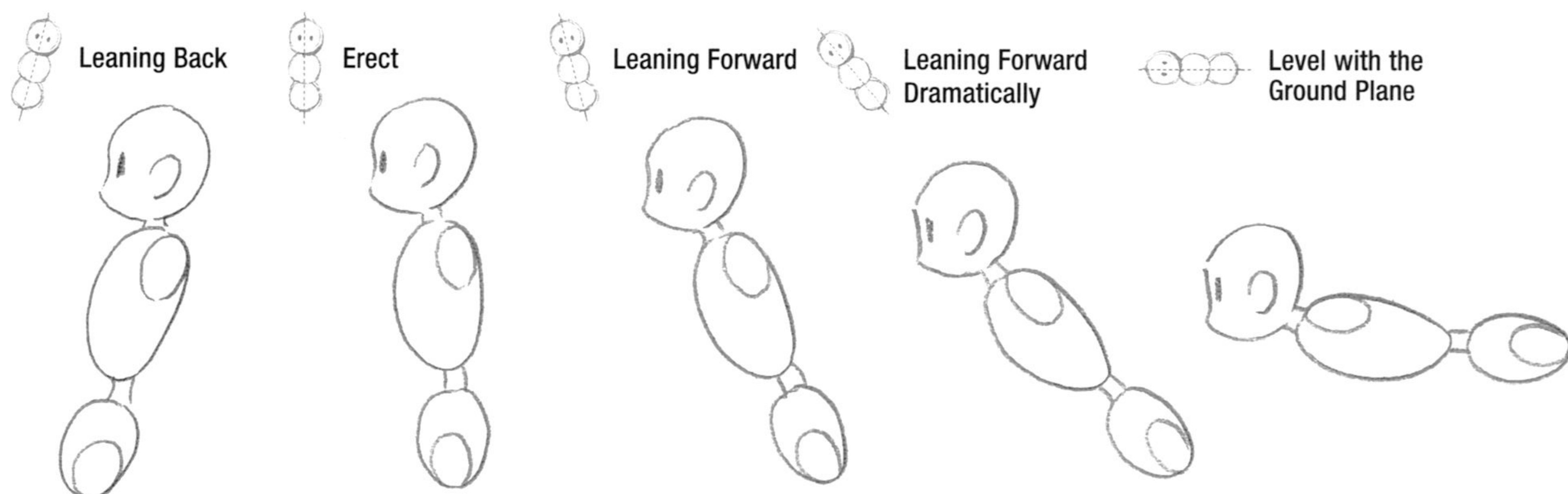
These images capture the center of gravity in the process of shifting. The character appears to be glancing over her shoulder while walking.

Manga Stylization to Portray Actions

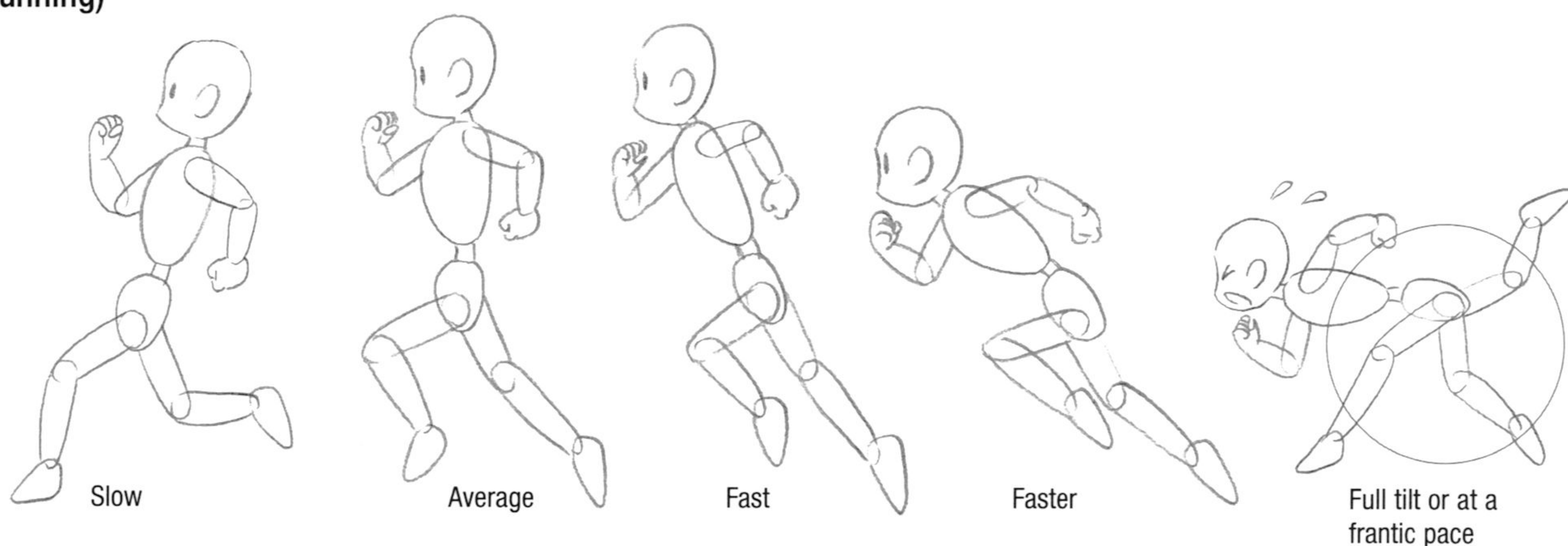
This section covers the basic stylization of common action poses that may be applied to almost any type of *manga*.

Five Common Stylized Postures

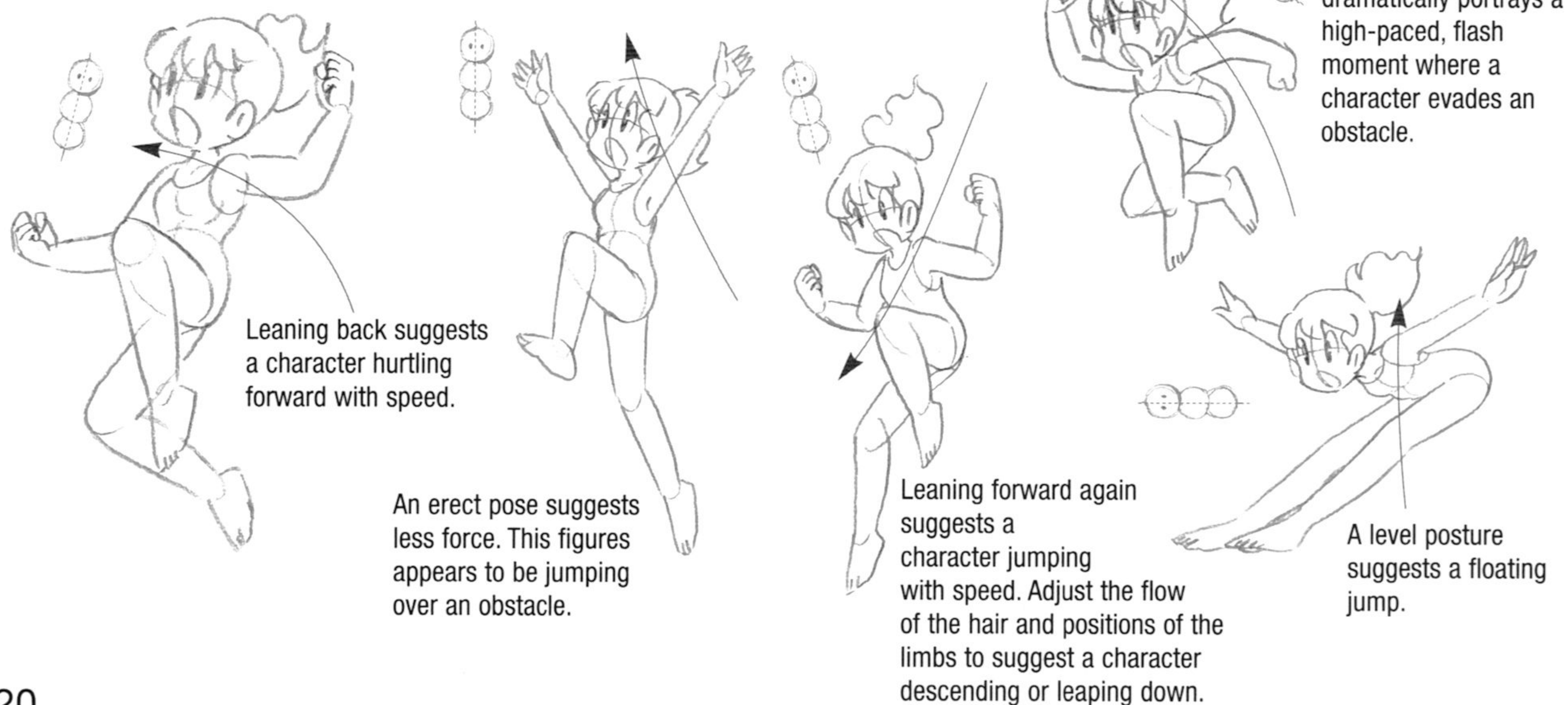
The root of action portrayal lies in evoking a sense of speed, and the following five simple postures allow you to distinguish between difference rates of speed.



Adding the Arms and Legs (Running)



Jumping Being conscious of the different postures will allow you to show characters jumping in a variety of manners appropriate to the situation.



Running: Five Postures

Leaning back suggests a slow pace, while the further forward a figure leans, the faster it seems to be moving.



Leaning Back



Erect



Leaning Forward



Leaning Forward Dramatically



Level with the Ground Plane

Profile View



When drawing a character leaning back, lower the groin's position.

To make the figure appear level to the ground plane, draw the body leaning forward to approximately the level of the groin.

Front View



Narrow the shoulders and draw the torso from a moderately low angle.

The further forward the figure leans; the more the torso should be foreshortened.

Draw the figure leaning forward to approximately the level of the groin.

3/4 View



Draw the body arcing back.

Draw the axial (center) lines at angles to capture the appropriate posture.



Leaning Back



Erect



Leaning Forward



Leaning Forward Dramatically

Rear, 3/4 View

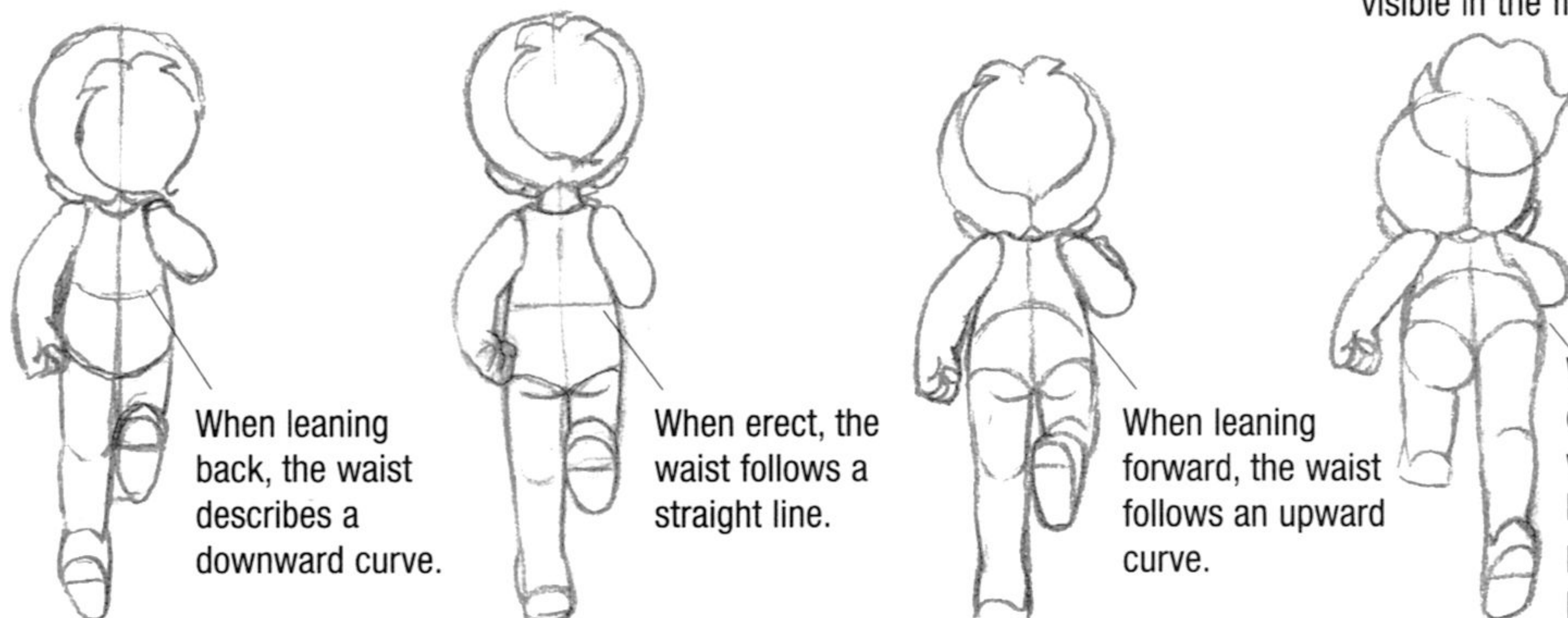
Use the spine to establish the posture.



Draw the figure maintaining awareness of how the spine would appear, even if the back will not be visible in the final image.

Rear View

Use the waist guideline to establish the posture.



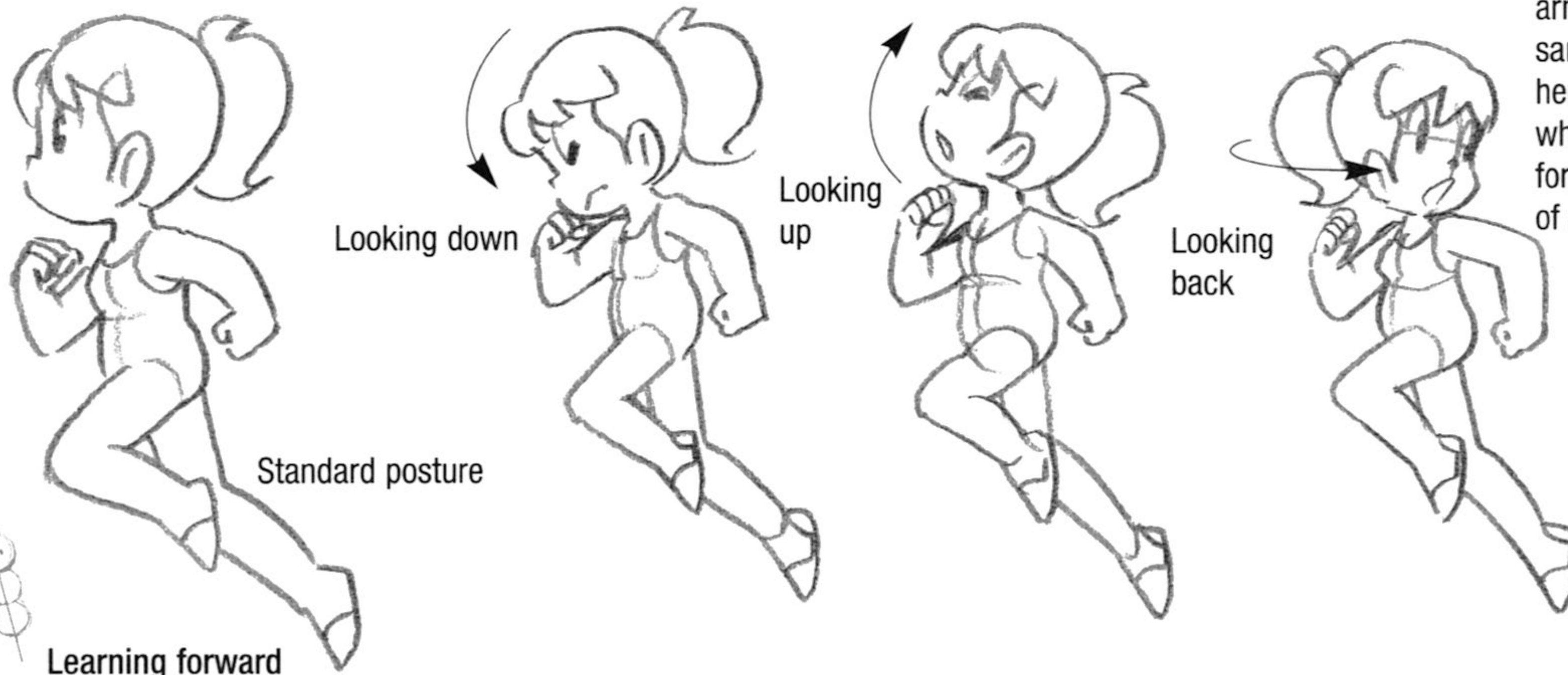
When leaning back, the waist describes a downward curve.

When erect, the waist follows a straight line.

When leaning forward, the waist follows an upward curve.

When leaning forward dramatically, the waist becomes hidden behind the posterior, and the posterior's contour then becomes a substitute for the waist.

Changing the Positions of the Head, Arms, and Legs When Running



Even though the posture, arms, and legs remain the same, in the figures seen here, shifting the direction in which the head faces allowed for the portrayal of a variety of situations.



Leaning forward

In the figures to the right, the posture and direction in which the head faces remain the same, but the altered arm and leg positions produce completely different atmospheres.



The way the hand is held also reflects the character's emotional state.

Jumping: Five Postures

Leaning back creates the illusion of moving in an upward or forward direction, while leaning forward suggests moving in a directly vertical rather than onward direction, with more dramatic leaning heightening the effect.



Leaning Back



Erect



Leaning Forward

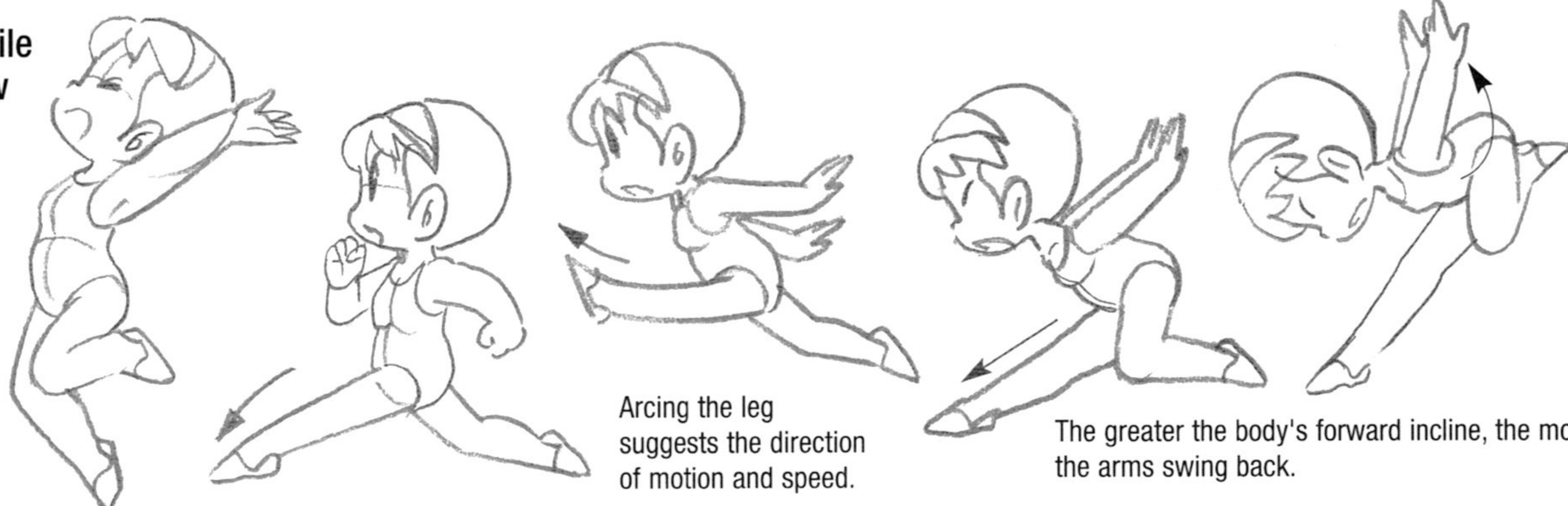


Leaning Forward Dramatically



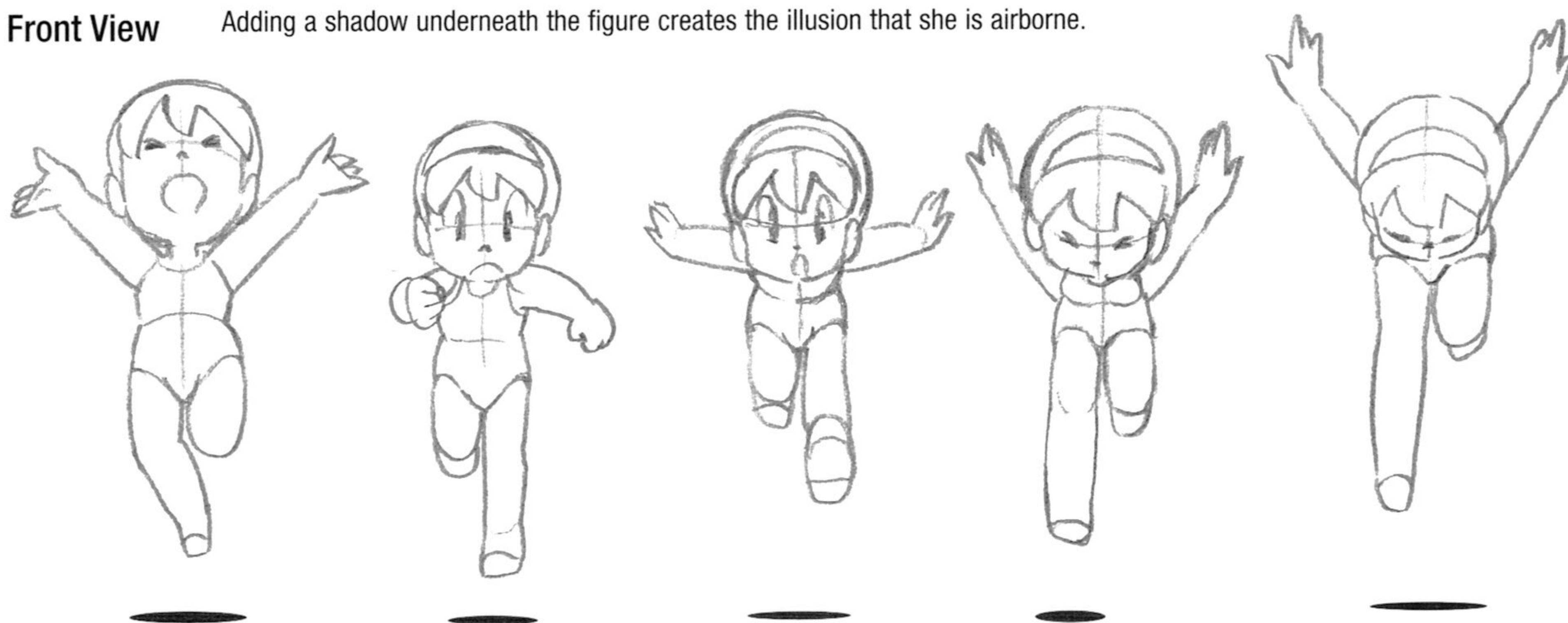
Level

Profile View



Front View

Adding a shadow underneath the figure creates the illusion that she is airborne.



3/4 View



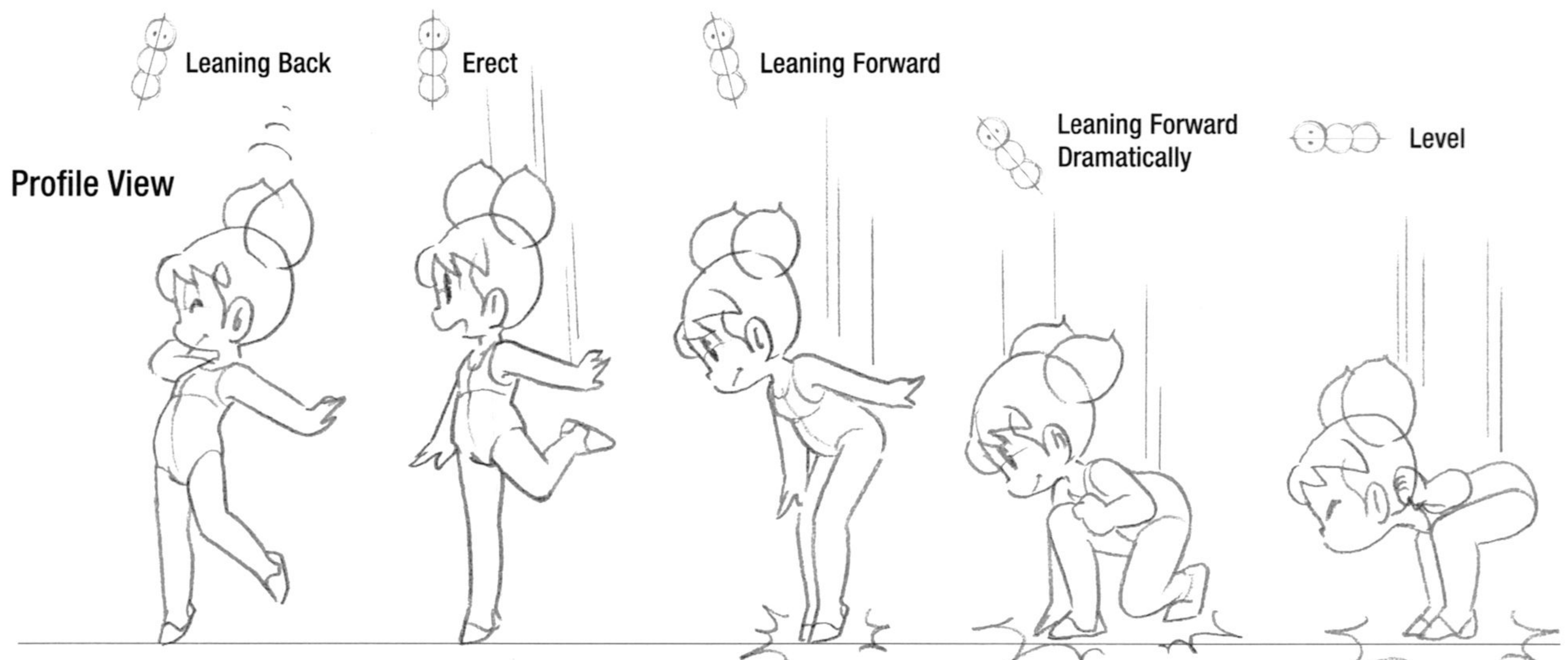
An erect jumping figure appears the same as an erect running, so add a shadow underneath to create the illusion that the character is suspended in air.



Shifting the same figure so that the extended foot points forward creates the illusion that she is moving in a horizontal direction.

Landing: Five Postures

Leaning back suggests nimbleness and buoyancy, while leaning forward portrays the force of impact or speed (i.e. elevation) of the leap.



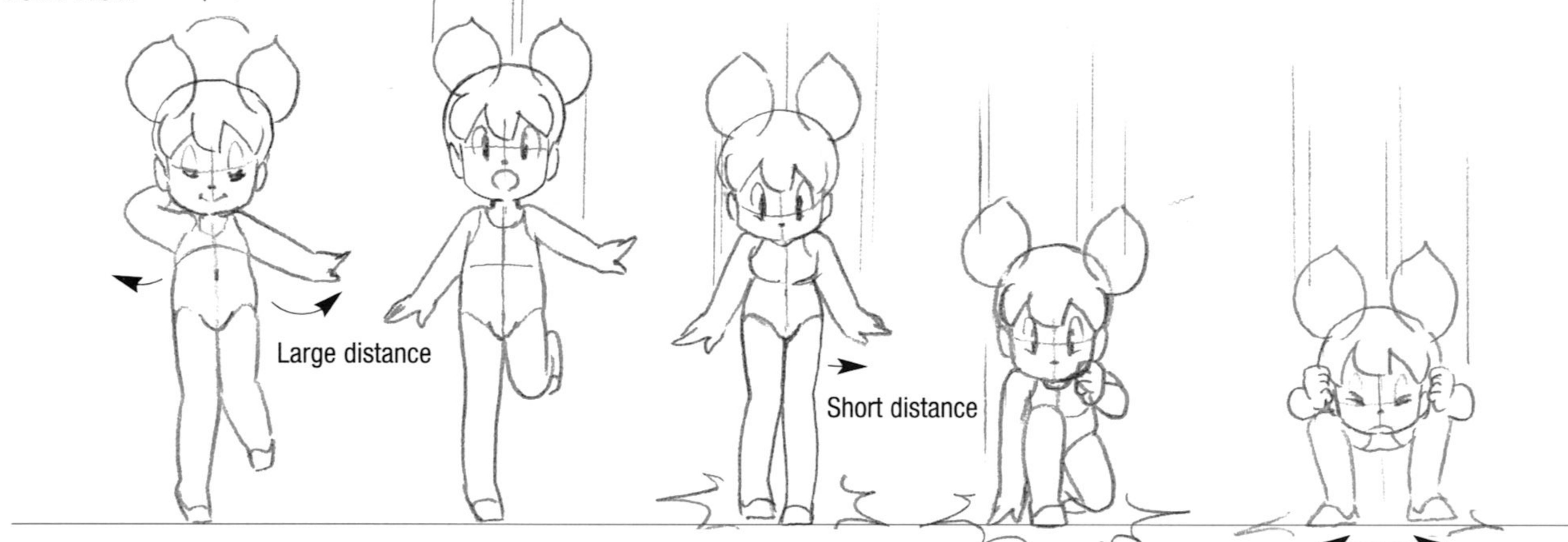
Raising one leg emphasizes the sense of light nimbleness.

Drawing both feet on the ground generates a sense of weight.

Use a dramatically leaning forward posture to portray a character kneeling on one leg.

The level pose produces a character striking an unusual pose when landing on the ground.

Front View



The greater the distance between the arm and the torso, the more relaxed the character appears.

In the above, the arms separate just barely from the torso.

Her hand just scarcely grazes the ground with her fingers.

With this posture, the arms are positioned a shoulder-width apart.

3/4 View



The leg touching the ground is extended.

The legs bend slightly at the knees.



Leaning Back



Erect



Leaning Forward



Leaning Forward Dramatically

Rear 3/4 View



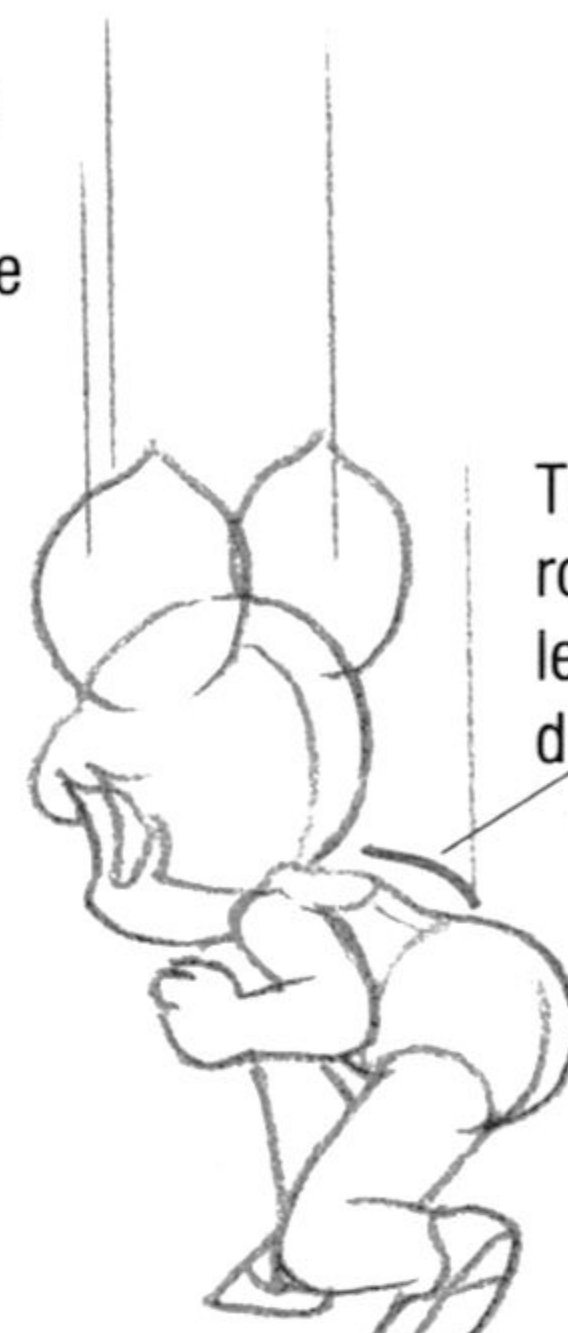
The palm angles slightly upward.



The palm faces down.

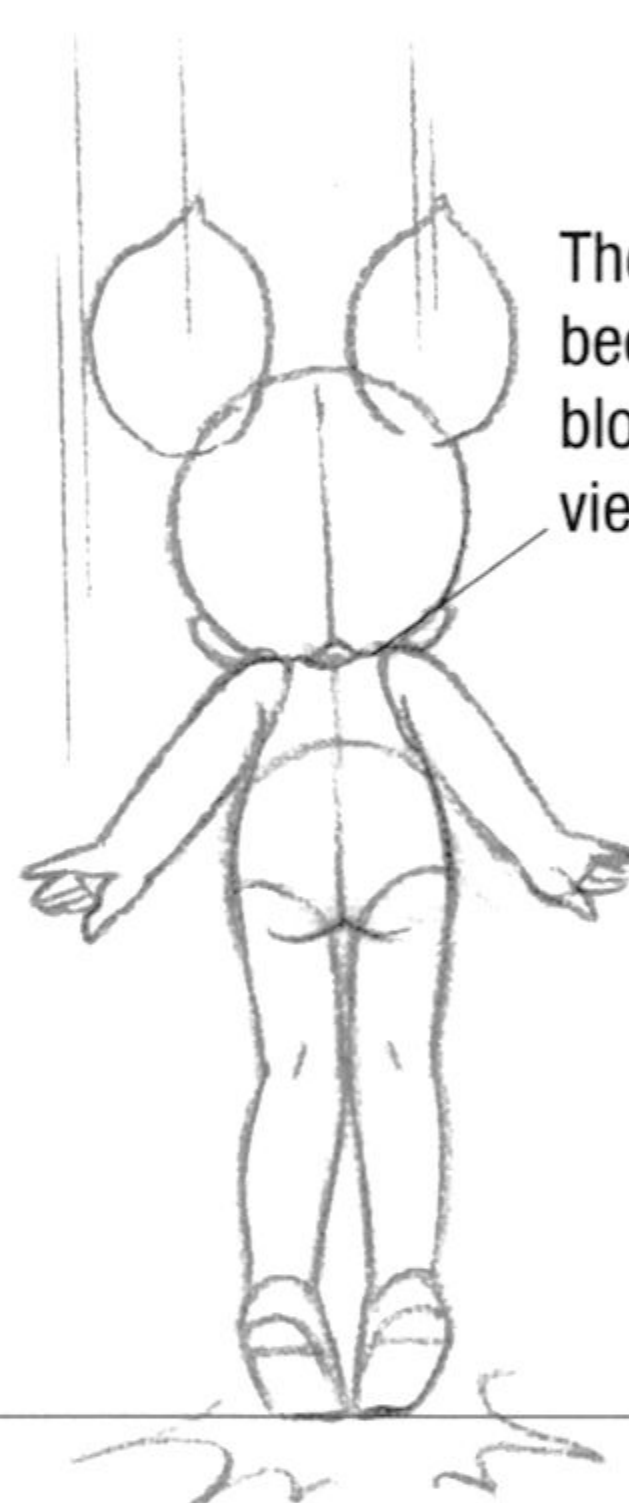


Showing the back arcing slightly makes the forward leaning posture appear more attractive.



The back becomes rounded when leaning forward dramatically.

Rear



The neck becomes virtually blocked from view.



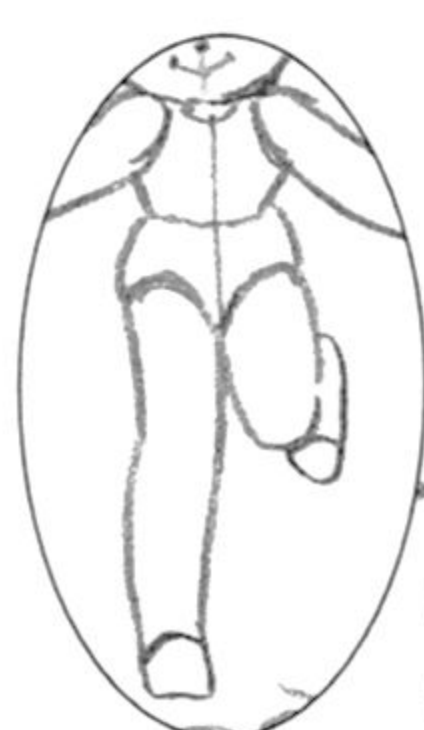
Using the Legs' Positions to Suggest Directionality

The position of a single leg suggests the direction of propulsion.

Example:
Leaning forward



One knee shifted forward suggests descending to the ground from directly above.



One leg swung back suggests leaping forward from a rearward direction to touch the ground.

Vertical effect lines

Descending from above



Arched effect lines



Leaping forward from behind.

Yawning Draw a large, gaping mouth.

1:4 Head-to-Body Ratio



Showing a character yawning with a downcast gaze makes her look sweet and endearing.

1:2 Head-to-Body Ratio
Have the mouth occupy more than half of the head.



We tend to turn our faces upward during a yawn's climax.



Here, the mouth is exaggerated such that it extends beyond the head's exterior contours. The mouth's interior has been simplified.

1:3 Head-to-Body Ratio
Strive to make the mouth occupy approximately half of the entire head.



At the beginning and end of a yawn, we tend to assume an ordinary posture.



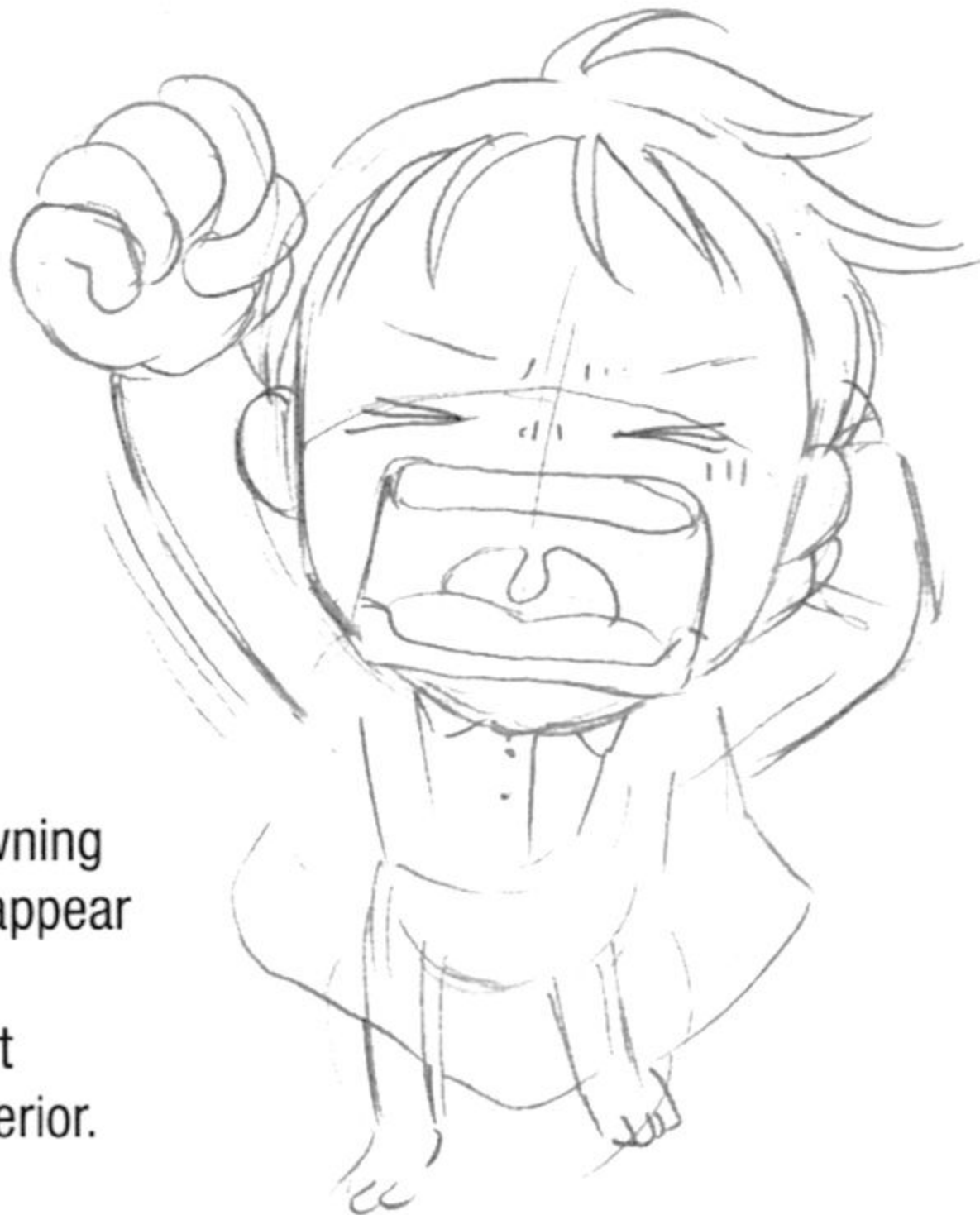
Establish the mouth's size at the layout stage in order to gain a concrete idea of how the final image should appear.



When a character is yawning broadly, make the face appear straining. To make the character look cute, omit drawing the mouth's interior.



From a high angle, the circles included in the yawning figure's layout grow smaller the further down the eye travels.



Sneezing

Sneezing causes the entire body to tense unconsciously. When sneezing, the body tends to assume characteristic poses, such as the elbows jut out, the hands curl into fists, etc. The face does not smile.

1:4 Head-to-Body Ratio



1:2 Head-to-Body Ratio

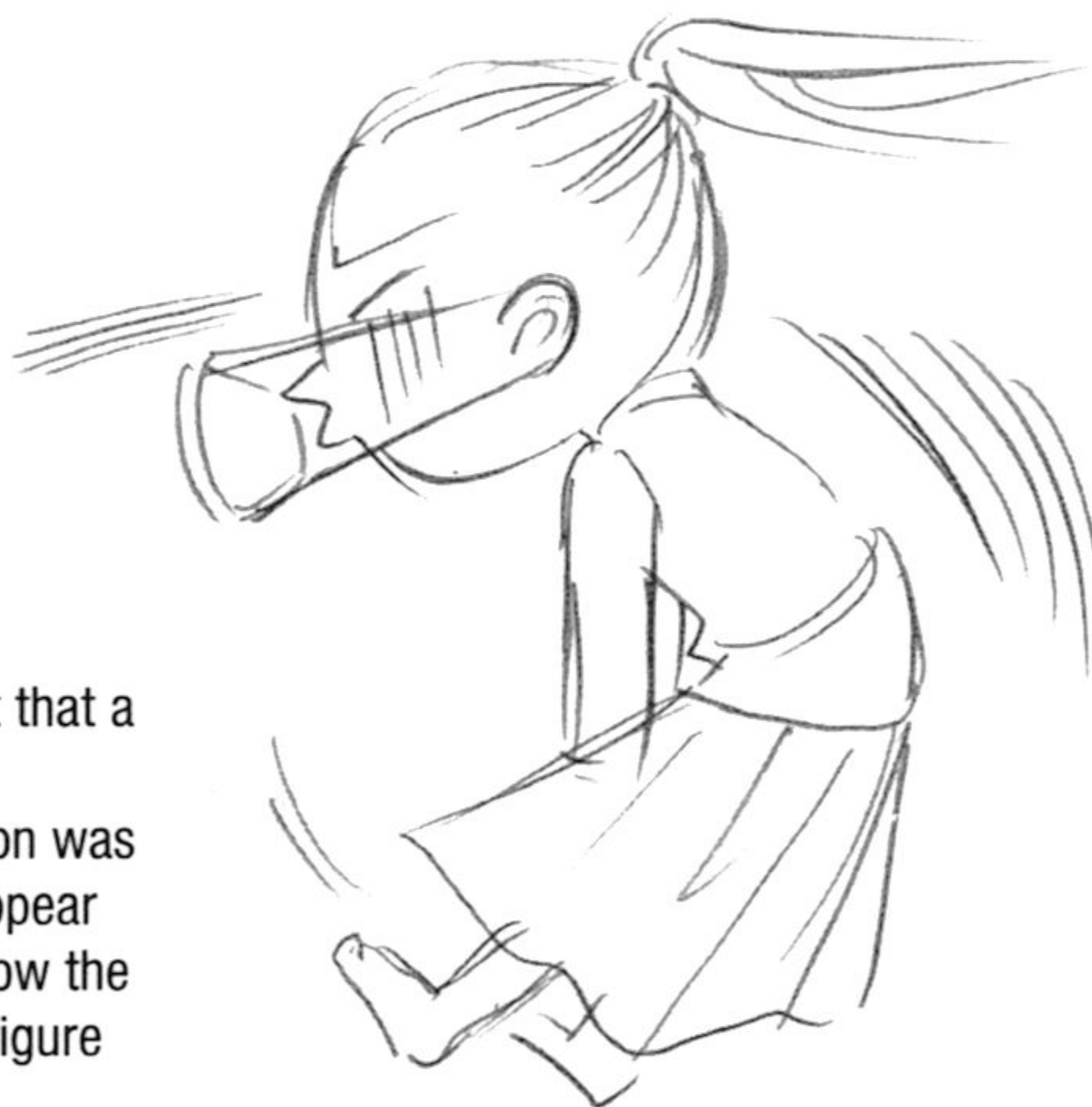


The above shows the mouth distorted to exaggerate the "ah!" part of the sneeze. Show the mouth widening exaggeratedly to the sides.

This figure shows the mouth distorted to exaggerate the "choo!" part of the sneeze. The breath blows forcefully from the mouth, so show the mouth rounding exaggeratedly as if pronouncing the sound "oo".

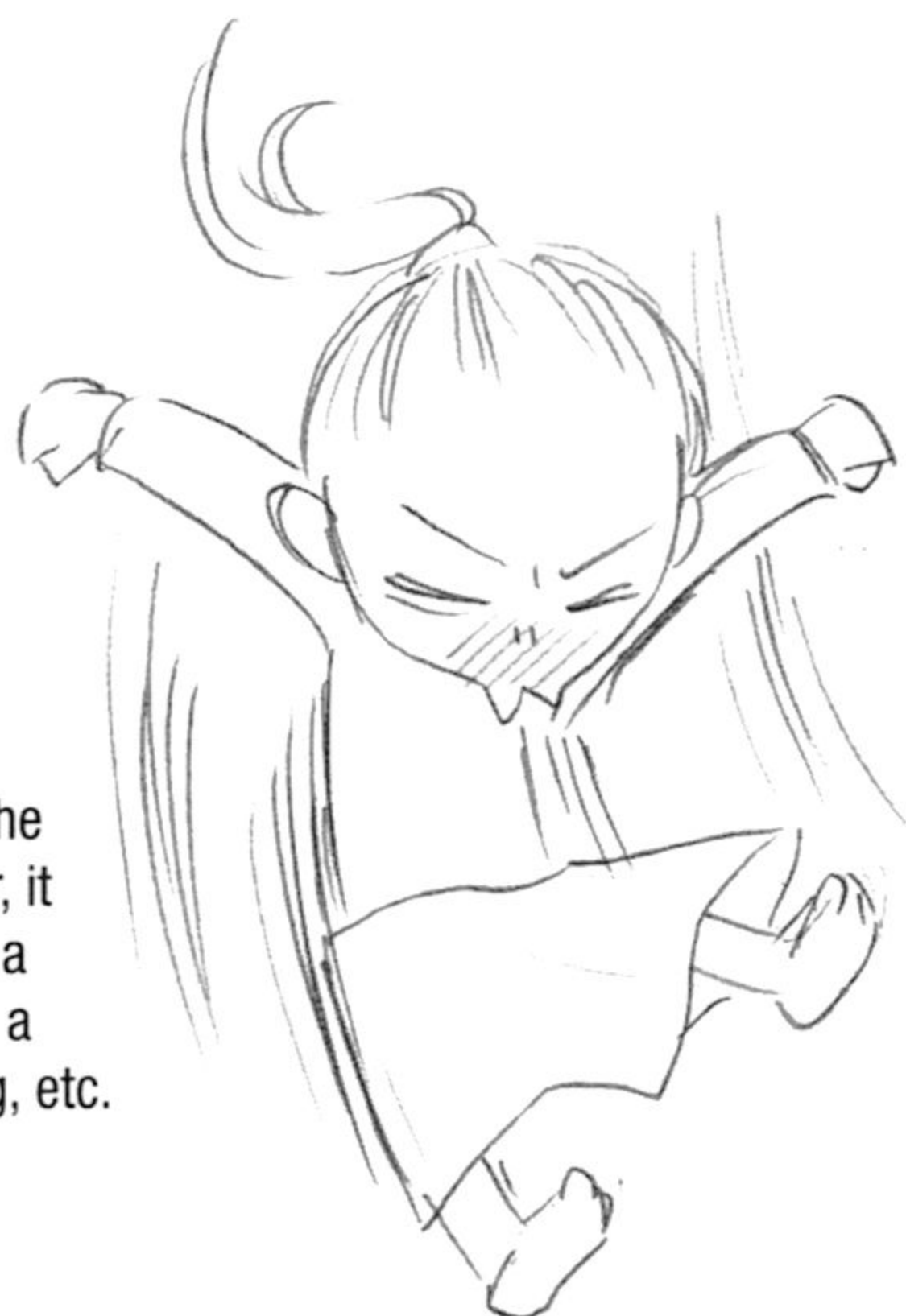


1:3 Head-to-Body Ratio



The entire body becomes involved in the act of sneezing, so show movement in the hair and skirt hem even if the character is standing.

The above portrays the moment that a sneeze blows the mask off the character's face. The composition was intended to make the sneeze appear so forceful that it might even blow the character, herself away, so the figure was drawn forming a large "U".



The layout above is actually the act of leaping down. However, it also lends itself to portraying a sneezing fit suddenly striking a character while walking along, etc.

Drawing an arcing back and arms jutting out portrays the character's feelings of hostility at being stricken by a sneeze. This is effective for portraying a growing sense of desperation in the face of an unstoppable sneeze.

Scratching the Head/Tearing at the Hair

This act may be applied to a range of situations from when a character simply feels itchy to throwing a tantrum.



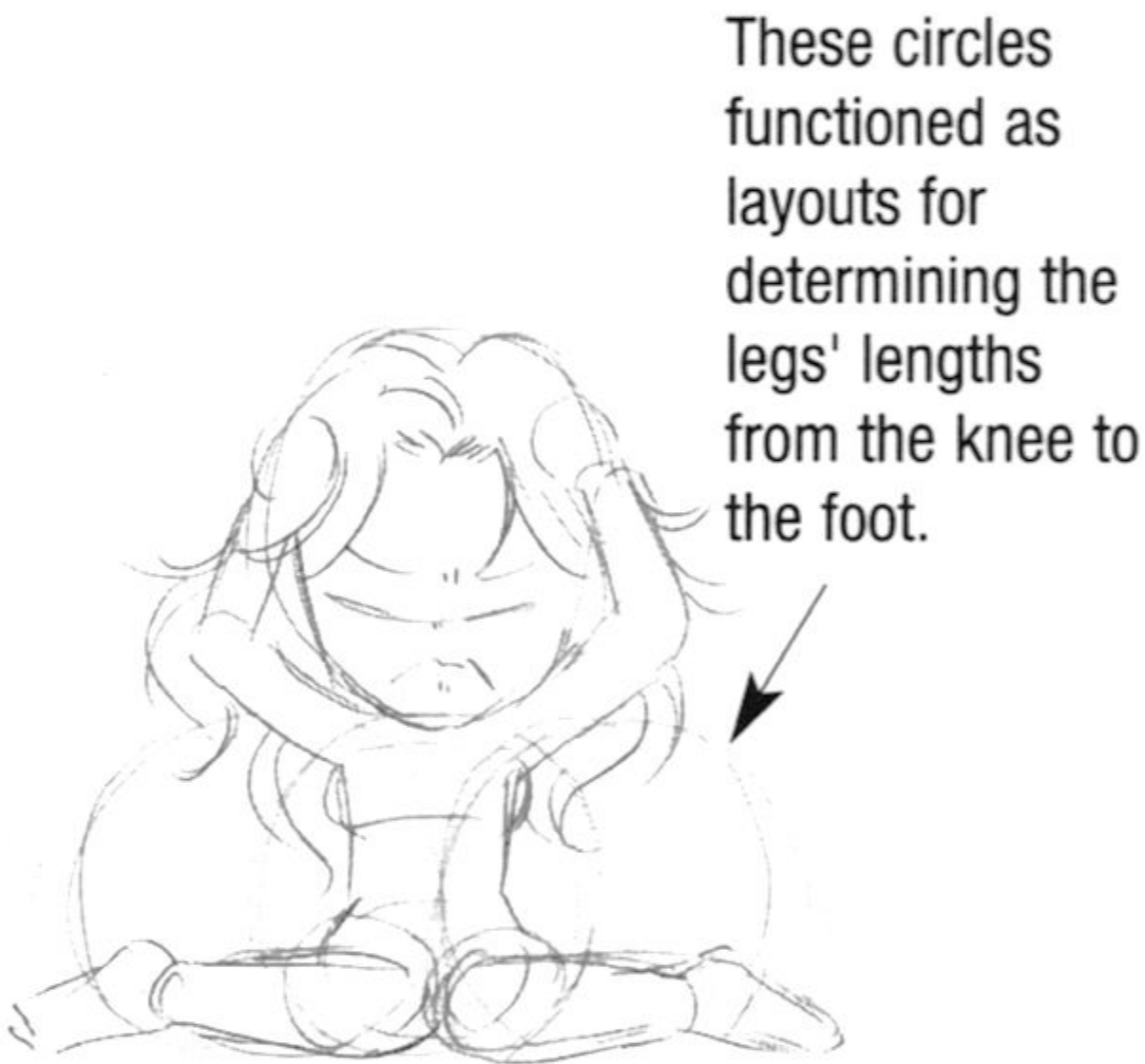
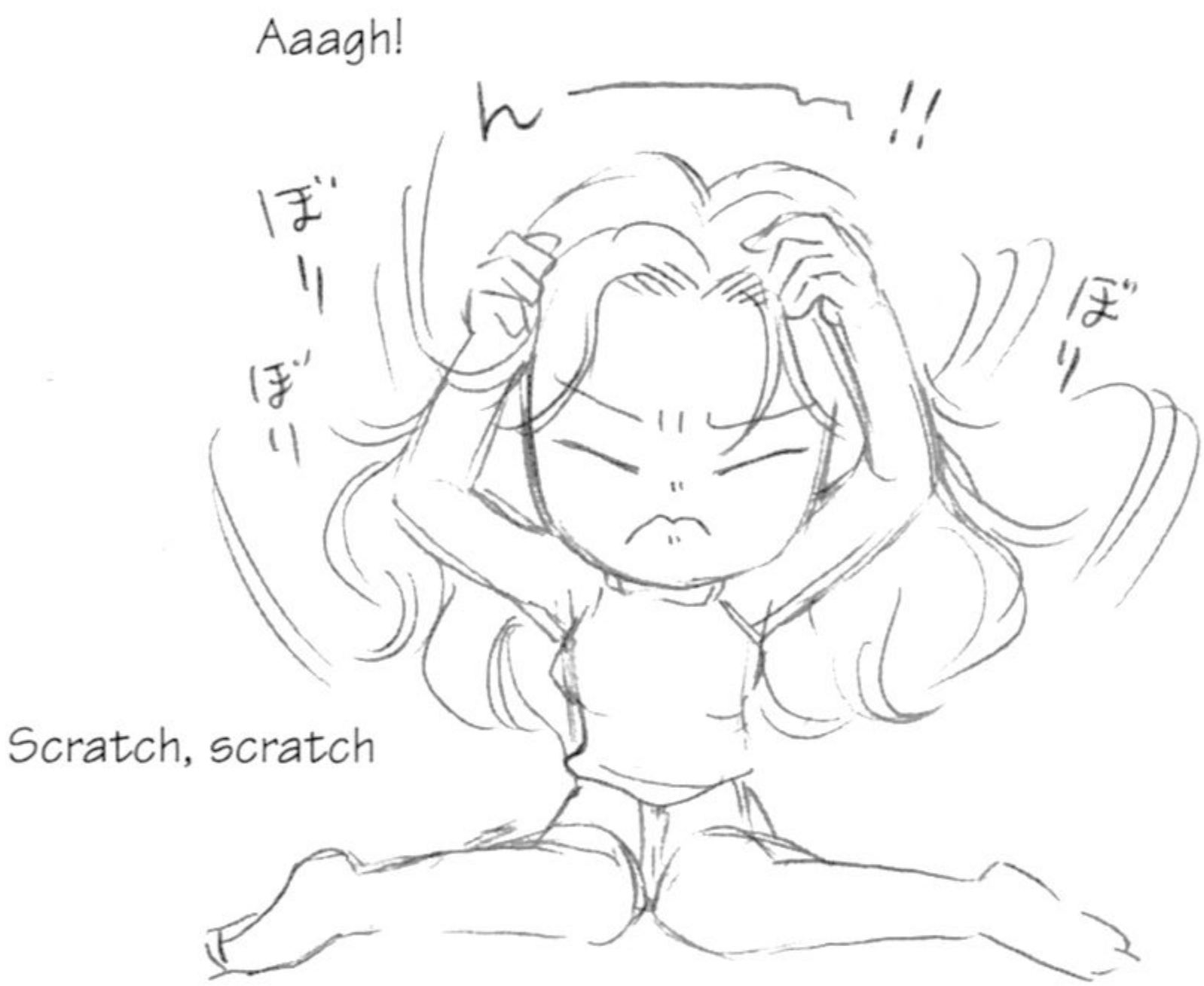
Note that the hand's fingers are not clenched into a fist. Show the fingers buried halfway into the hair.

Scratch, scratch



On a character drawn at a 1:2 head-to-body ratio, the hand is able to reach no further than the forehead.

The above shows a character scratching an itchy spot on her head with her hand.



The above shows a girl who appears to be holding her head. The effect lines and sound effects convey movement and itchiness.



The above shows a four-armed figure. The character appears frazzled, and we sense her aggravation even without added special effect lines.



The addition of special effect lines and sound effects portrays an atmosphere of panic extending beyond mere distress.



The above shows a character with her head turned down while she scratches it. The arms were omitted. Instead, multiple hands scratch the head.



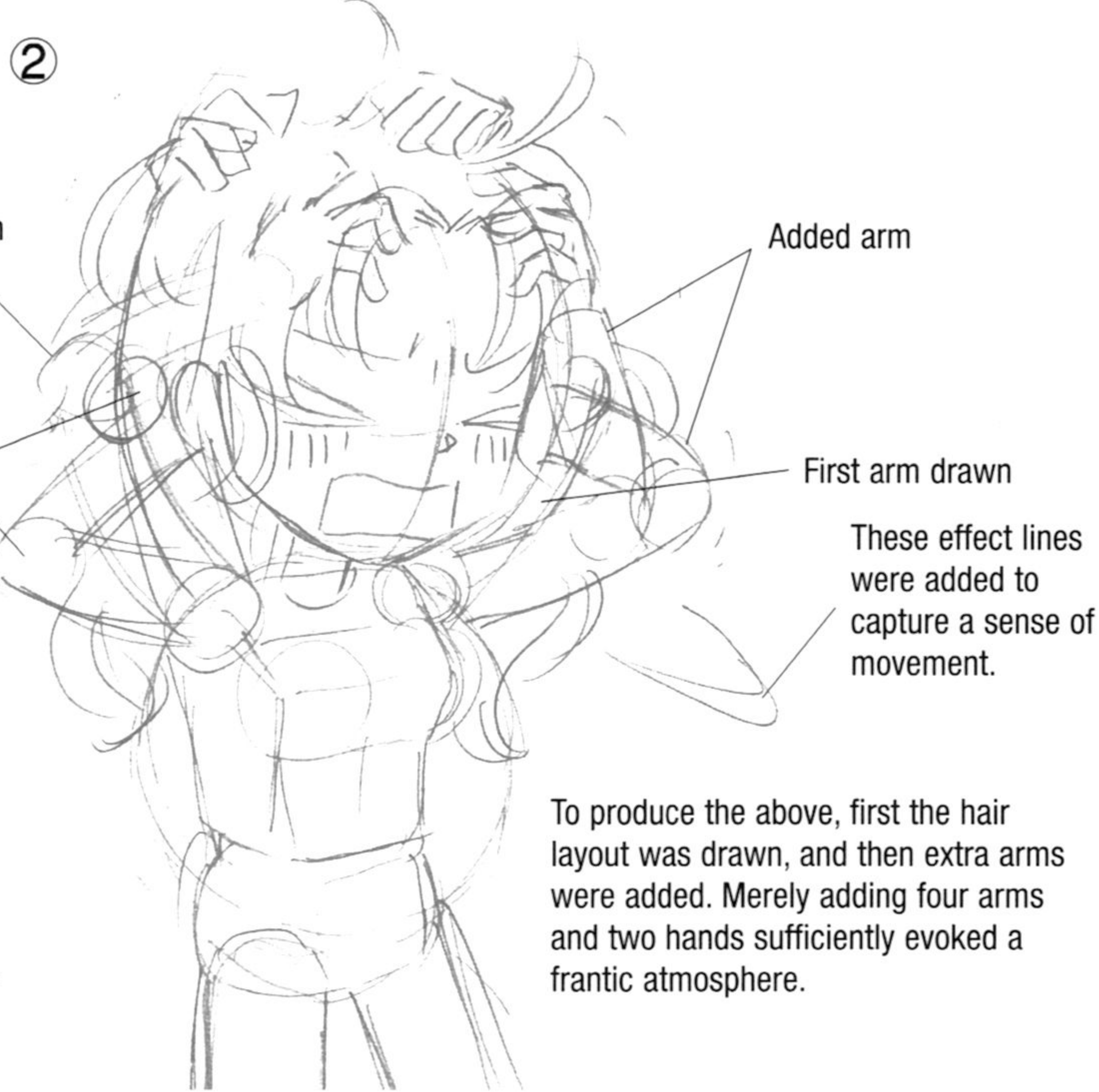
Each hand lies at a different angle and has differently positioned fingers. All of the hands should be drawn at approximately the same size.

Studying the Portrayal of Rapid Motion in Scratching the Head

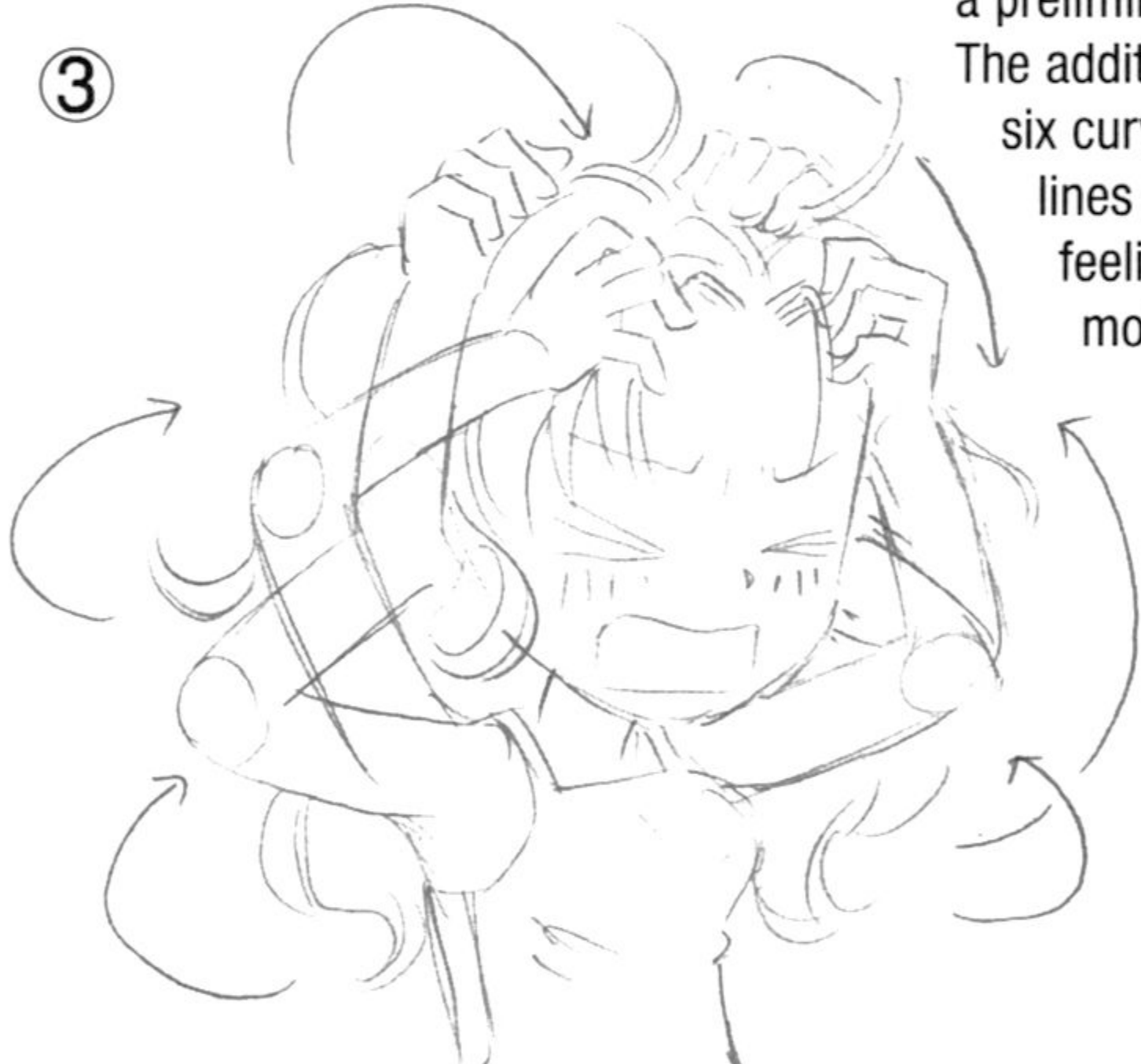


The above layout displays the act of holding the head. This pose may be applied to reacting with alarm, etc.

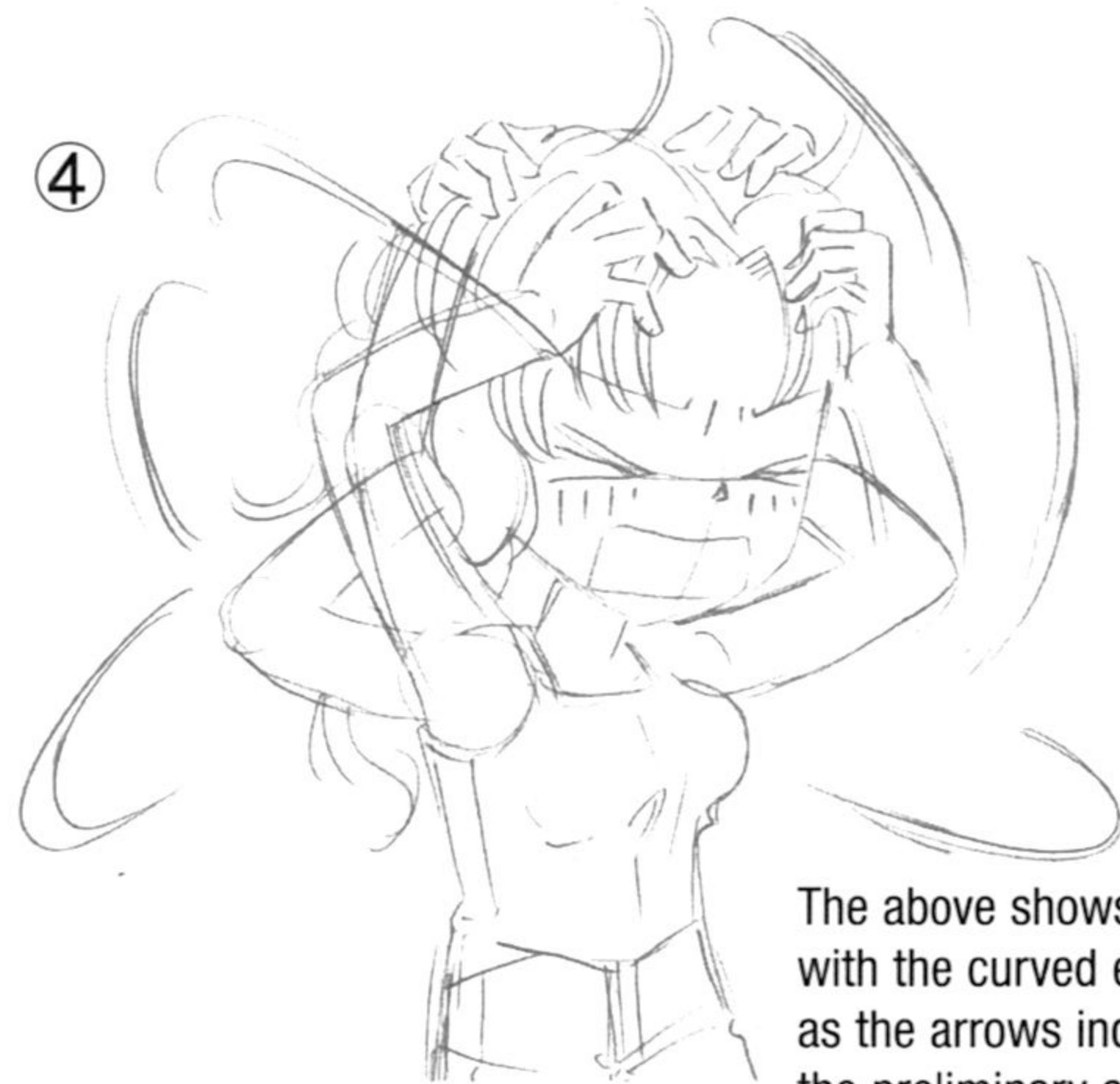
The feet rock back on their heels, suggesting an agitated psychological state.



To produce the above, first the hair layout was drawn, and then extra arms were added. Merely adding four arms and two hands sufficiently evoked a frantic atmosphere.



The figure to the left is a preliminary sketch. The addition of five to six curved effect lines creates the feeling of violent motion.



The above shows the girl with the curved effect lines as the arrows indicated in the preliminary sketch.



Final image

Gobbling Food

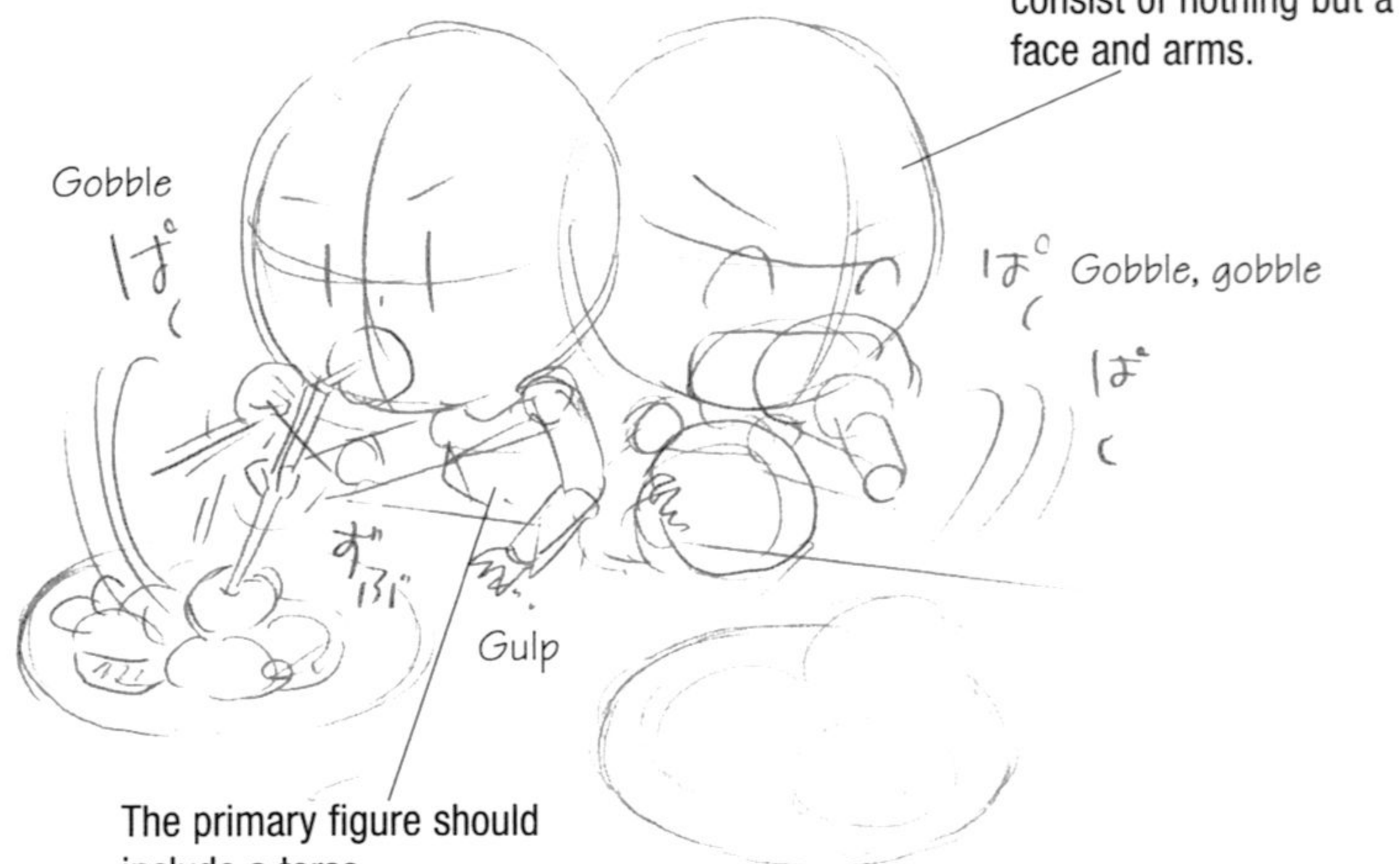
Drawing a single character with multiple faces and bodies creates the illusion of fast-paced motion.

Gobble

Gobble, gobble



The girl reaches for everything in sight. The figure echoes evoke a sense of rapid movement. The theme of the above composition is "hunger."



The primary figure should include a torso.



Here, three bodies suggest rapid movement to the right and left. Now, "greed" seems to be more the theme rather than "hunger."

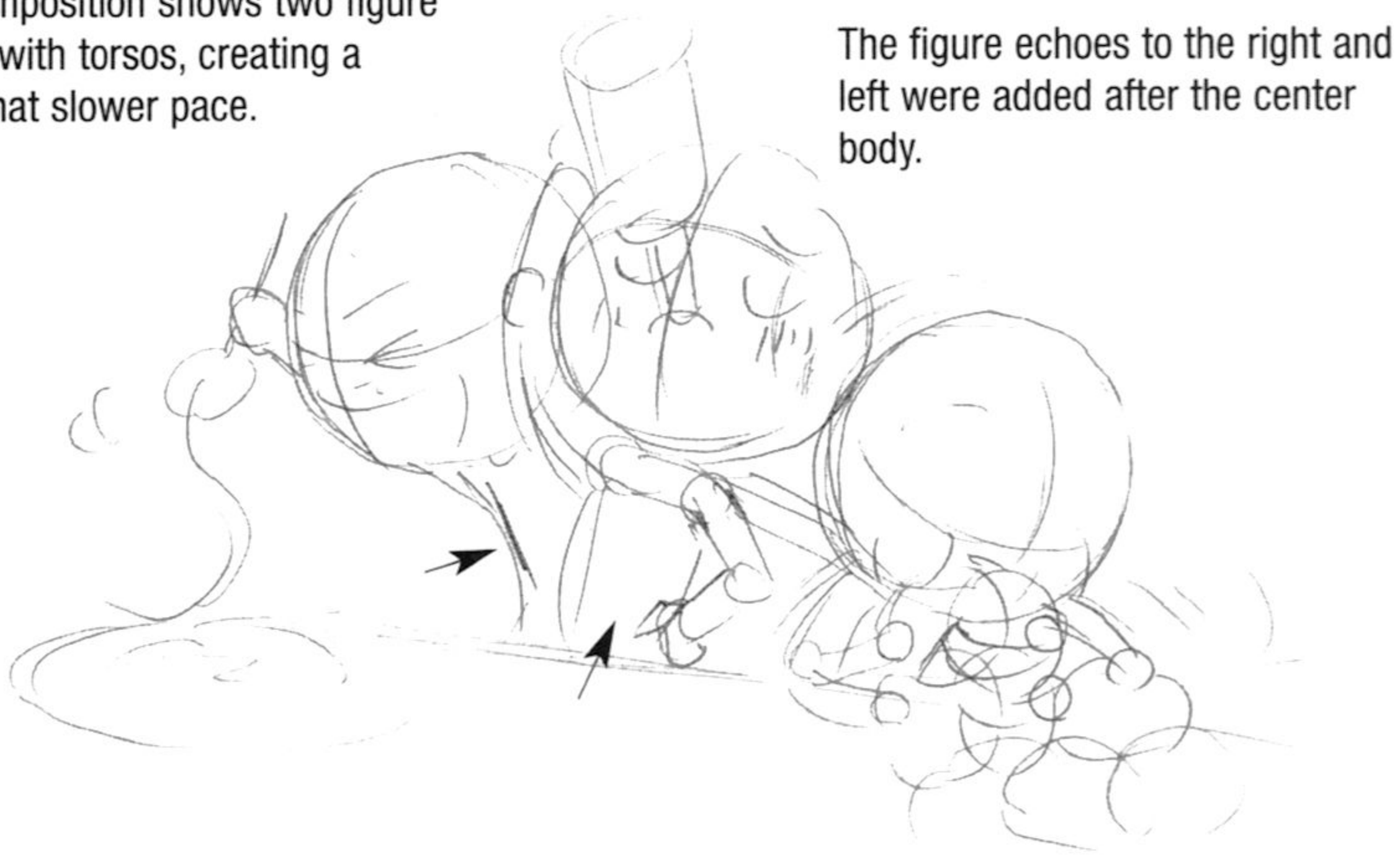


The center body should be drawn first.



The central body turns a bottle upside down to chug down its contents, while the right and left bodies add an up and down movement to the overall composition. This creates the effect of a stop-motion camera within this whirlwind of action, suggesting that the character is relishing eating and drinking so much that she can't help but gorge herself.

This composition shows two figure echoes with torsos, creating a somewhat slower pace.



The figure echoes to the right and left were added after the center body.



Here we see a girl gobbling meat at a tremendous pace. Both the piece of meat and hand are portrayed using echoed images.



The portion of the arm obscured by the piece of meat was included in the preliminary sketch.

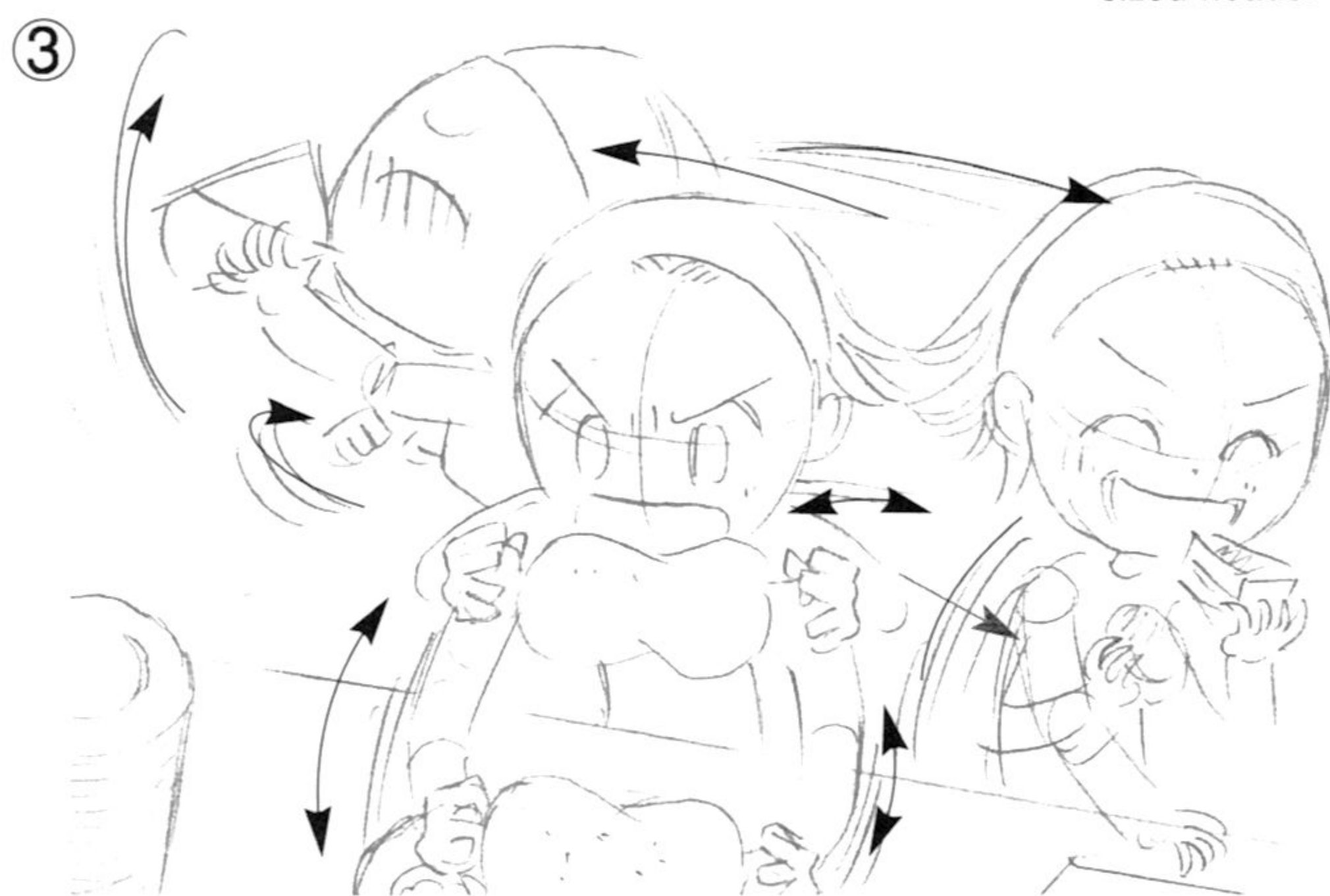
The Figure Echo Drawing Process



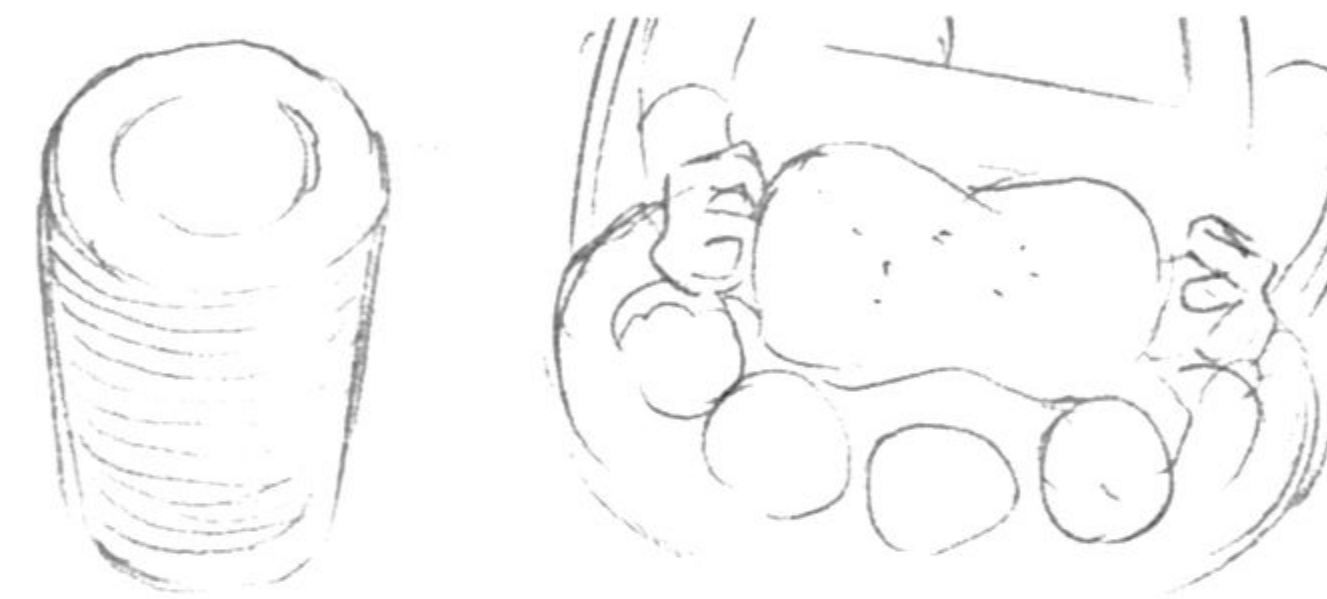
Start by drawing the central figure. If this particular figure's movements must be made to appear rapid, then add multiple arms, etc. at this stage.



Next, other actions this character performs are added. Drawing the echoes' heads facing different directions and striking diverse poses makes the composition more interesting. All of the figure echoes should have the same sized heads.

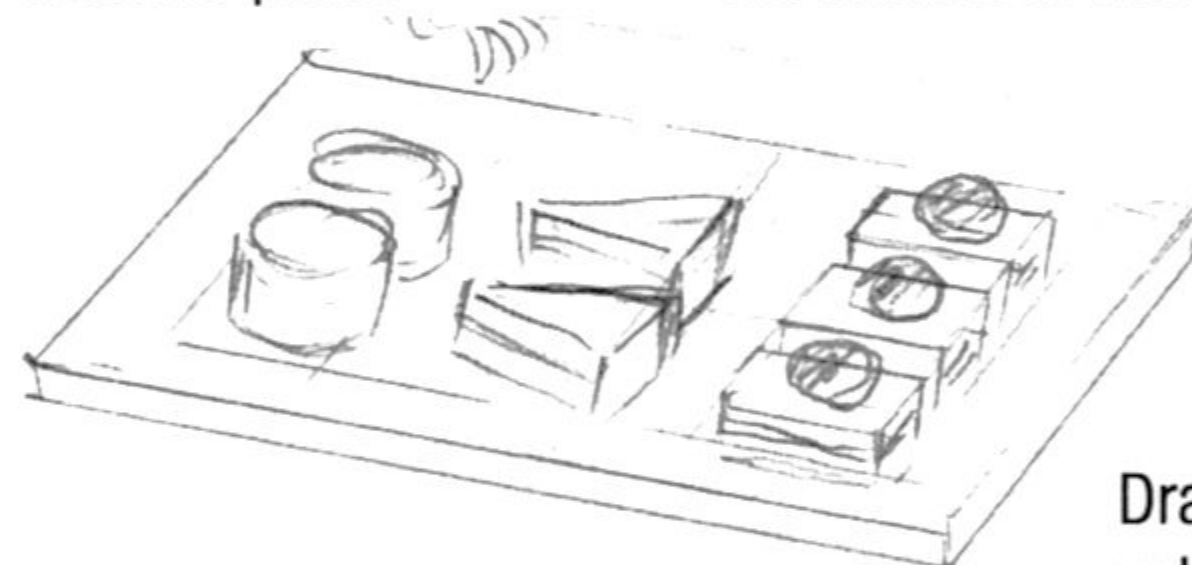


Add special effect lines that match the movements depicted in the composition.



Stack of plates

An enormous roast

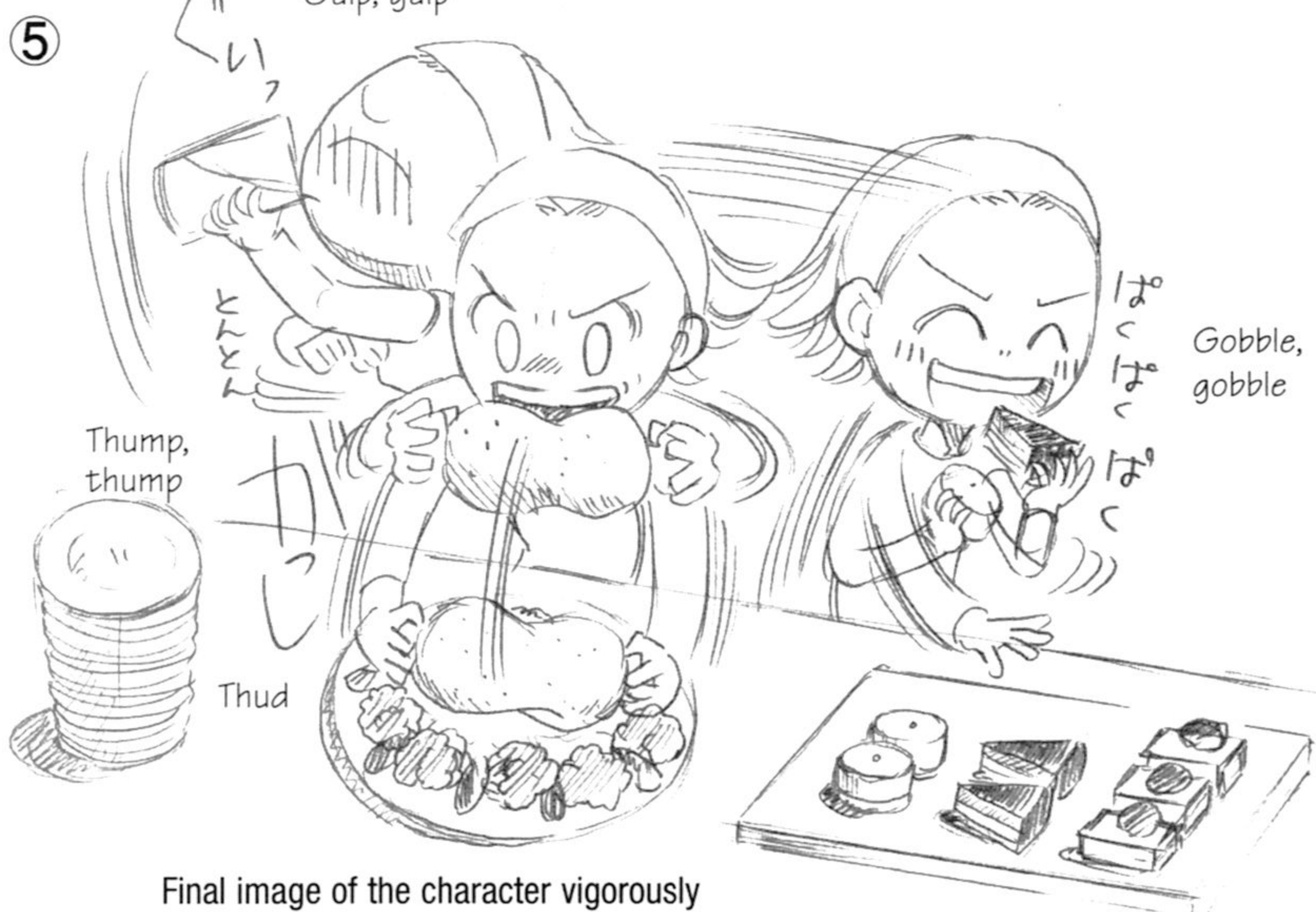


A cornucopia of cake

Draw an exaggerated volume of food as well to dramatize the scene.



Add details and sound effects (as handwritten words) to complete the composition.



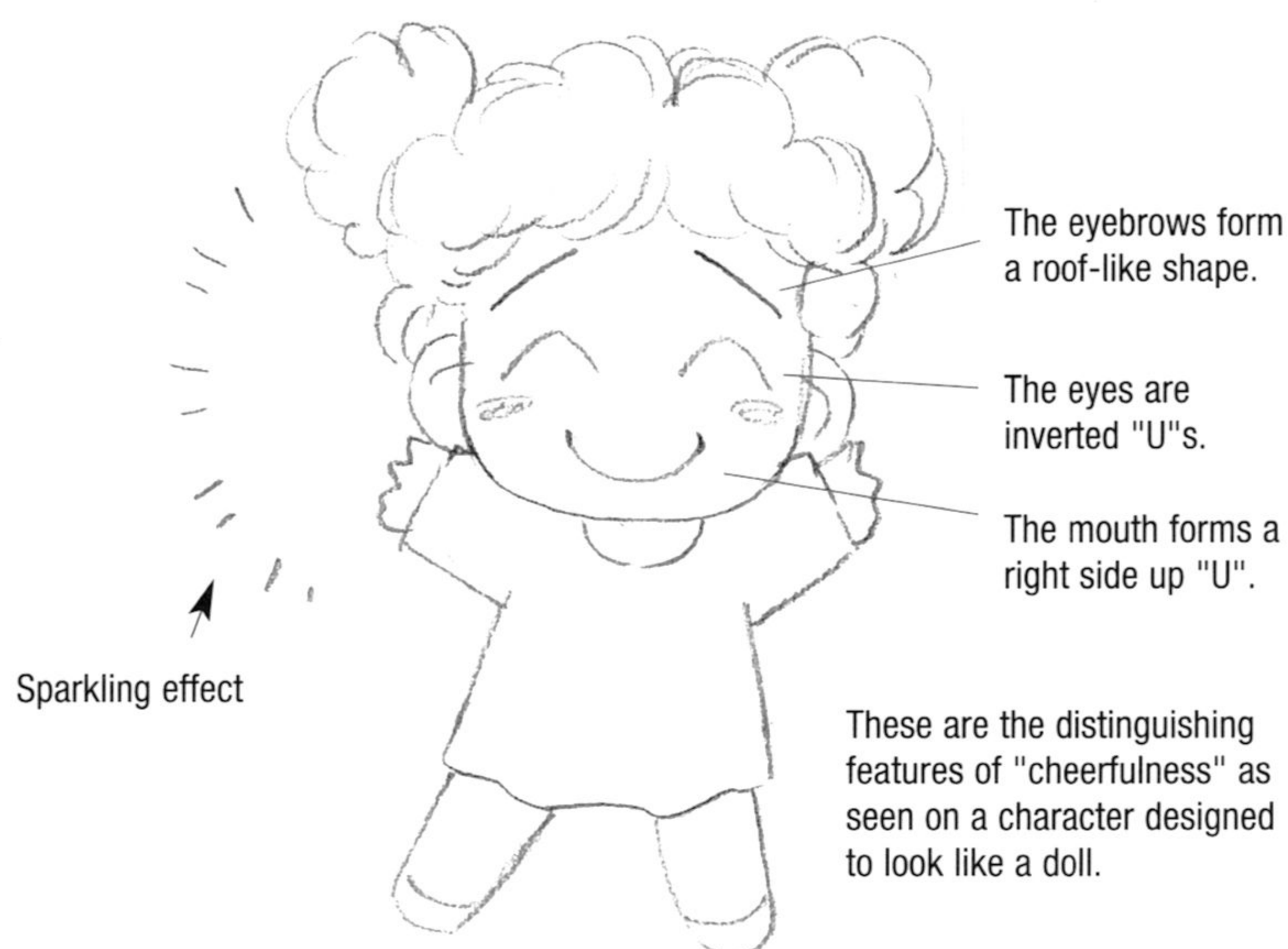
Final image of the character vigorously gorging herself.

Stylizing Emotions

Stylized emotions work well when they are exaggerated and melodramatic. Make an effort to master using the face and body to portray emotions.

Cheerfulness

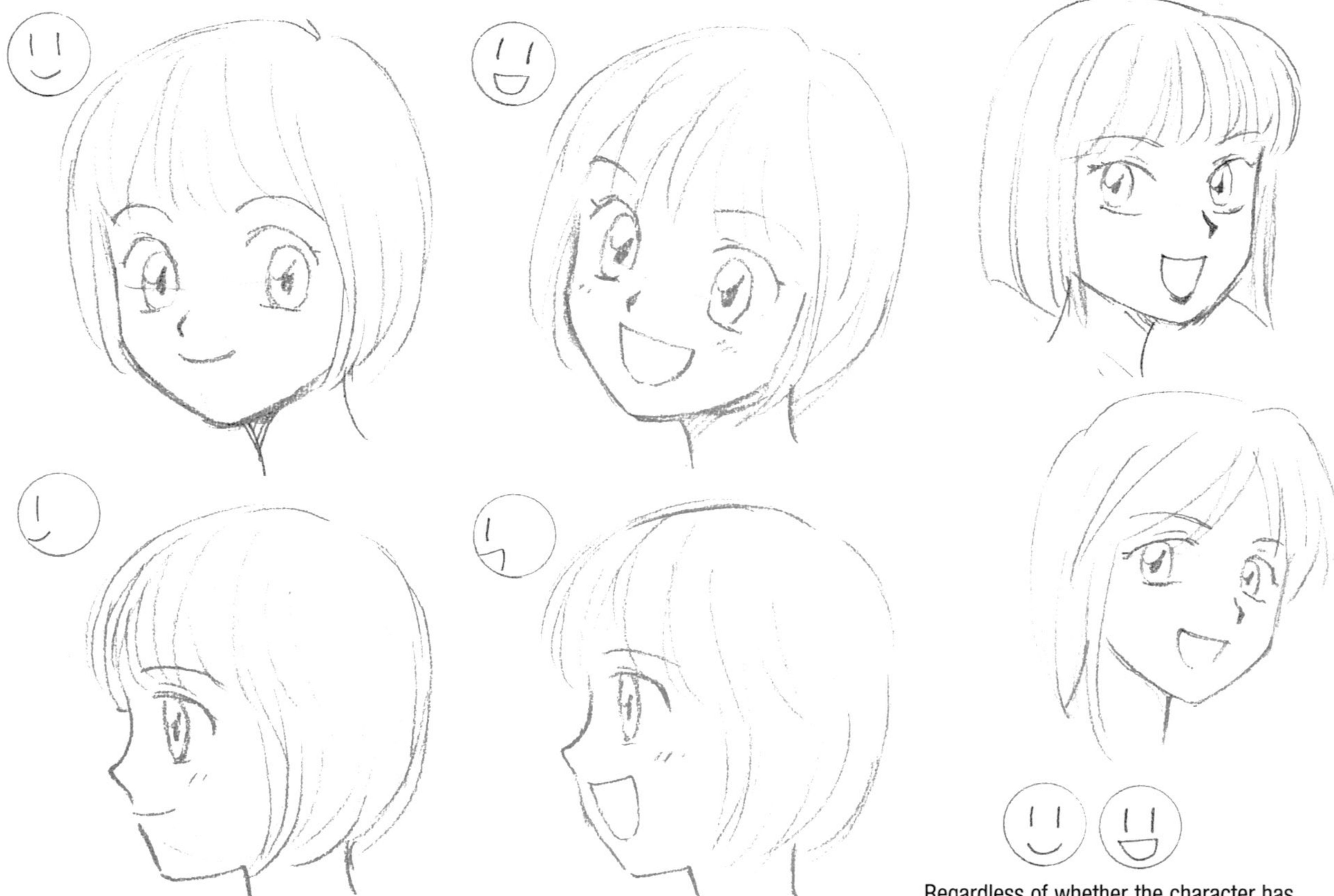
Laughter and feelings of joy, delight, etc.



This pose layout shows the limbs radiating in four directions from the figure's center. When portraying a cheery emotional state, select outward radiating or open postures and stances.

Smiling: Effects of the Mouth

Use the mouth to indicate delight, joy, and cheer.



Regardless of whether the character has upturning or downward slanting eyes, showing the corners of the mouth turned up will give the character a cheerful expression.

Joy Portrayed through the Body



Exuberant



Showing the body extending outward and arcing back suggests a cheerful, happy mood.



Having the body arc backward when running and jumping also suggests a buoyant, bubbly mood.



Delight → Rapture → Bursting into Dance: Heightened Expressions of Joy

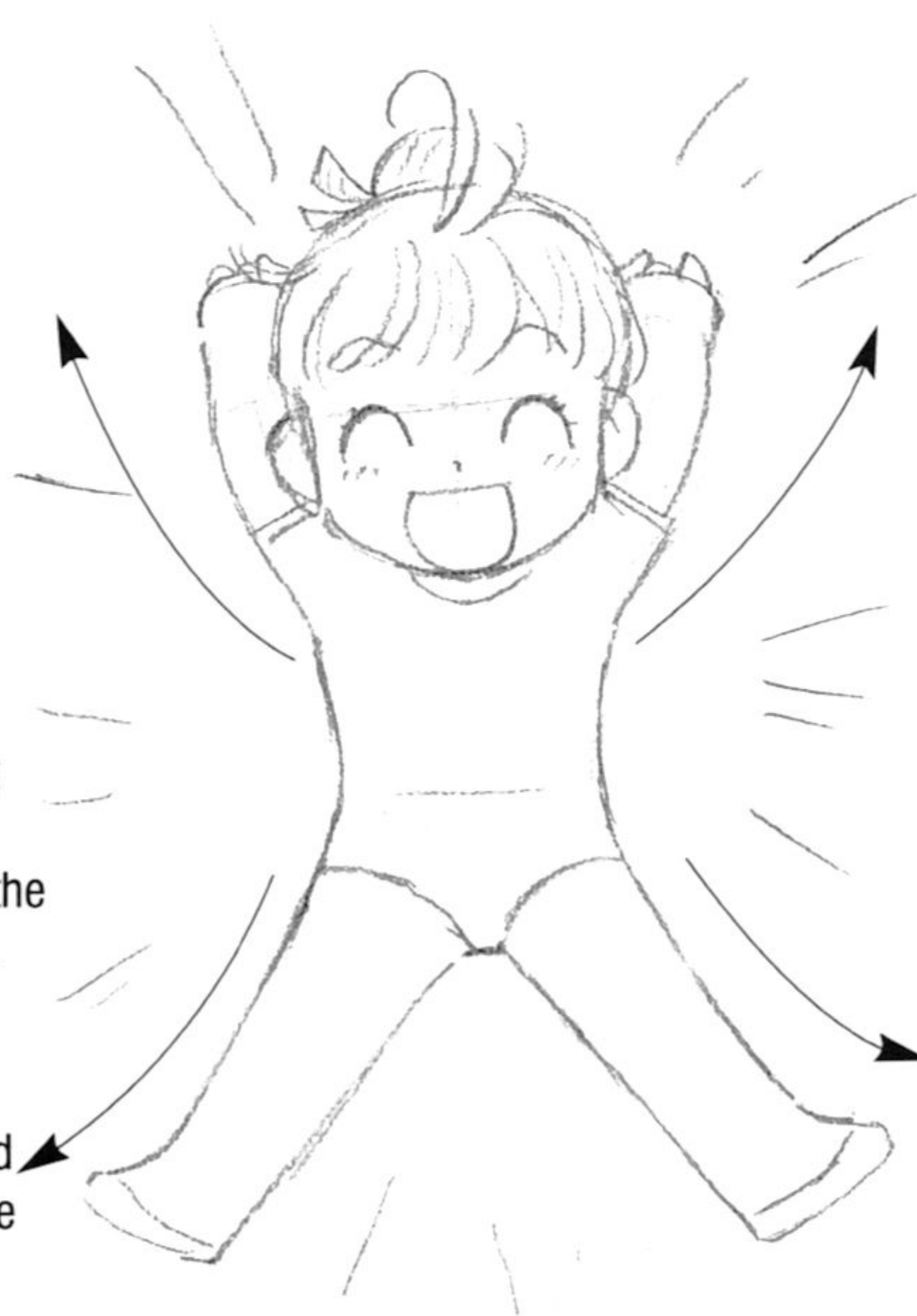
A body extending into outward directions is used to portray each mood.



The elbows lift away from the torso, leaving the sides exposed.

Showing one leg raised creates the appearance of leaping with joy.

The actions of leaping and raising both arms express delight and jubilation. The tautly extended fingers and open palms evoke a cheerful atmosphere.



Draw the limbs radiating in four directions to portray rapture or elation.



Show the arms waving above the head or the arms and legs extending away from the body to portray an ecstatic or thrilled emotional state.

Laughing While Standing

Draw a rough layout.



To portray a character standing erectly and laughing, show the chin tilted up.



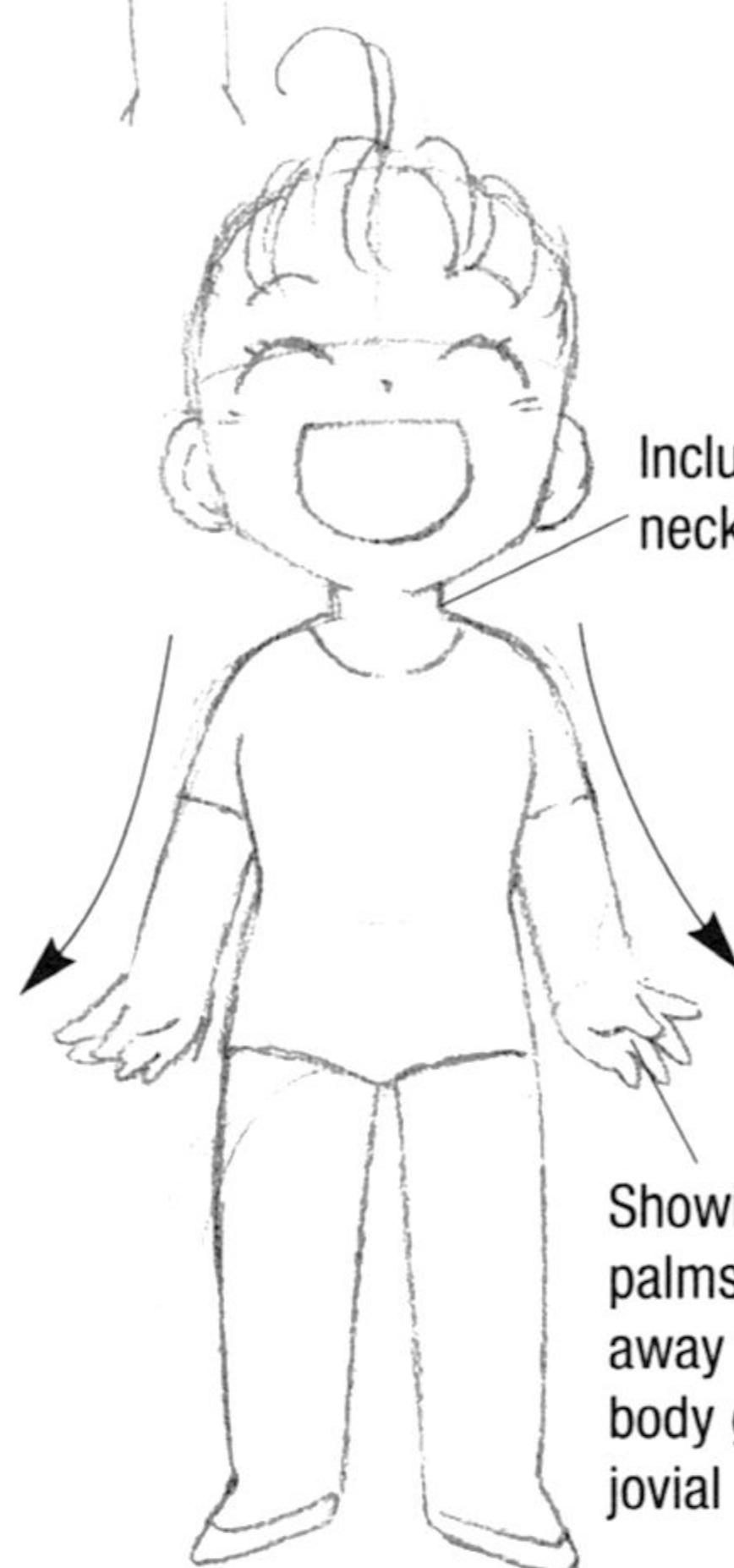
To portray a character bending over with laughter, draw the upper body leaning forward and use a moderate high angle composition.



To show a character twisting with laughter, draw the head and body turned in two different directions.



Draw the body arched like a bow to portray a character thrusting her head back and laughing. This is the posture a character will assume when holding her belly in laughter.



Include the neck.

Showing the palms faced away from the body generates a jovial mood.



Draw the upper body.

The torso becomes foreshortened.



Showing the underside of the foot sends the figure off balance, creating a sense of movement.



Collapsing with Laughter: Actually Falling Over and Laughing



Rolling on the ground with laughter involves balling up the body. The elbows and knees bend.

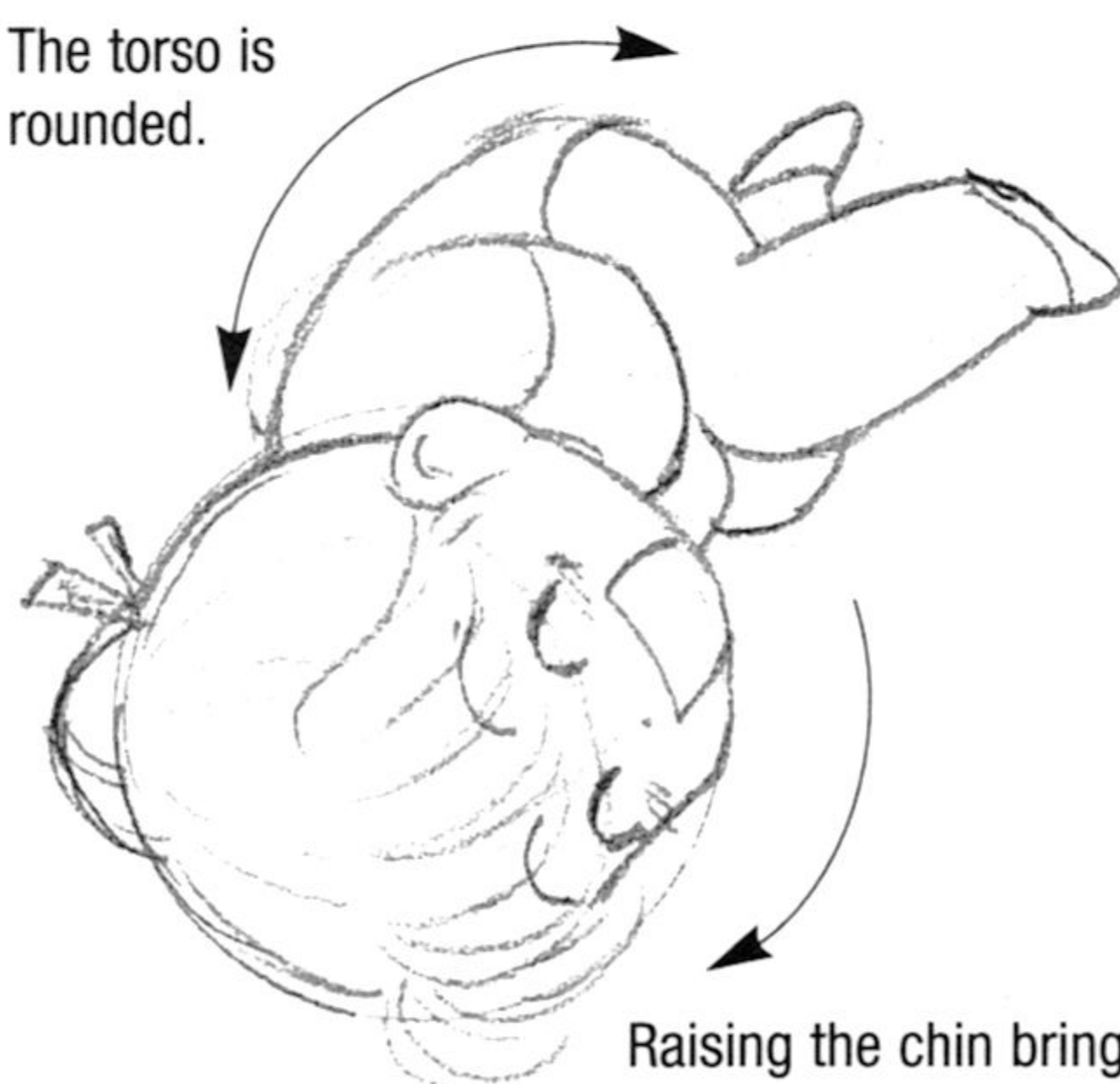


Pounding the ground with laughter consists of the character lying on her stomach. Showing only one arm and one leg bent evokes a sense of movement.



The character ends up lying on her back when bowled back with laughter. Showing both arms and legs or both legs extended removes a sense of movement, while showing one leg and one arm bent creates movement.

The torso is rounded.



Raising the chin brings the face into view, creating an atmosphere of open brightness.



Having the arms and legs extend away from the body creates an open, jolly mood.

Laughing Face Composed from a Low Angle

As the chin rises, the magnitude of the laugh appears to increase.



The underside of the raised chin is not visible in the above. The hook-shaped nose and longish neck are key features of this head.

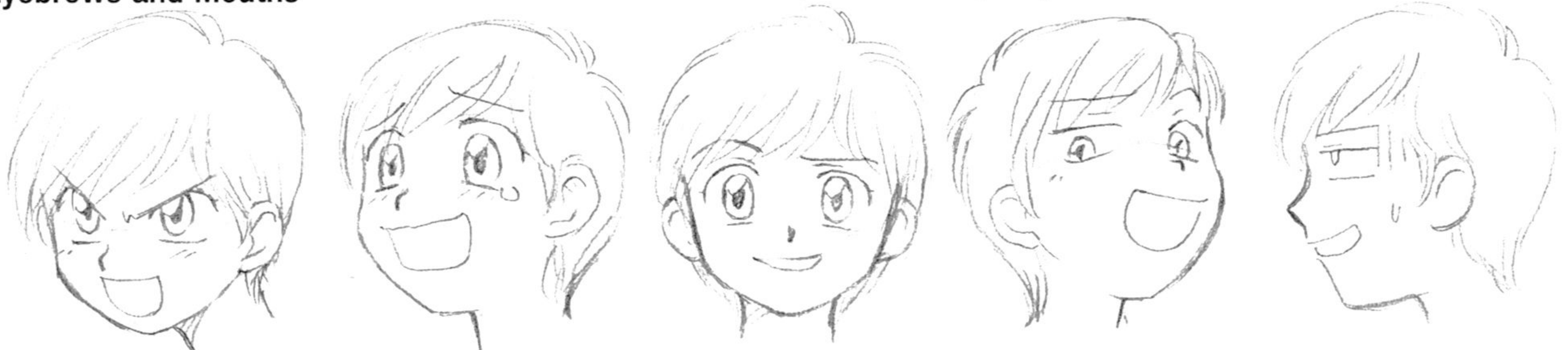
Raising the chin even further results in a face composed from a low angle. The underside of the jaw is now visible.

Raising the chin to an even greater extent results in the proportion occupied by the features above the mouth to decrease.

Here, the head tilts dramatically back in laughter. The mouth and nose are the only features visible.

Atypical Smiles: Smiles with Contorted Eyebrows and Mouths

Using asymmetry in the eyebrows, eyes, or mouth eliminates a cheerful atmosphere. These techniques are used to portray subtle emotions.



Sneer

Tearful smile

Sardonic smile

Mocking laugh

Strained smile

Jolly Furniture and Flowers

Using arcing (outward extending) forms is an effective technique with subjects other than humans.



To suggest an inanimate object dancing, position its various props and accessories in a radiating pattern.

Draw the mouths of animals in a smile.



Stylized, blissful joy consists of drawing exposed palms, the soles of the feet, and open limbs extending in four directions in addition to a smiling face. Use these techniques to portray a cheerful, bright mood.

The head faces down.

The eyebrows form a roof-like shape.

The mouth is turned into an upside-down "U".

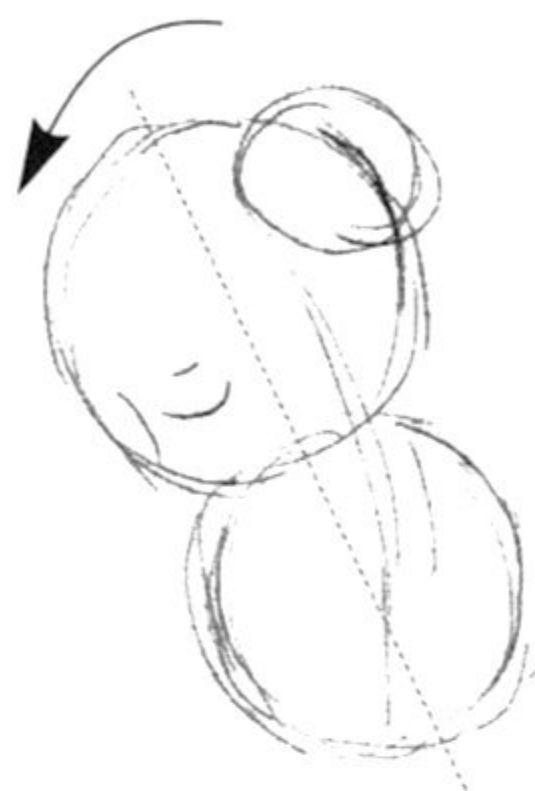
The shoulders sag.

The drooping head and sagging shoulders cause the neck to become obscured from a front view.

Disappointed, dejected posture



Draw the shoulders sagging and the figure on her knees, etc.



To sketch the pose layout, draw two marshmallows on a tilted stick. Conceive of a character as turning inward or curling into a ball when portraying a gloomy emotional state.



When the character becomes depressed, etc. show the melancholic emotional state reflected in her carriage by the entire body "turning inward."

Eyebrow and Mouth Effects

Use the eyebrows and mouth to express anxiety, loneliness, sorrow, and other unhappy emotions.



Anxious, worried



Sad, anguished



Increasingly anxious and melancholic



Sad; on the brink of tears



Crying



Note the wrinkle at the brow. Furrowed eyebrows form a curved roof-like shape.

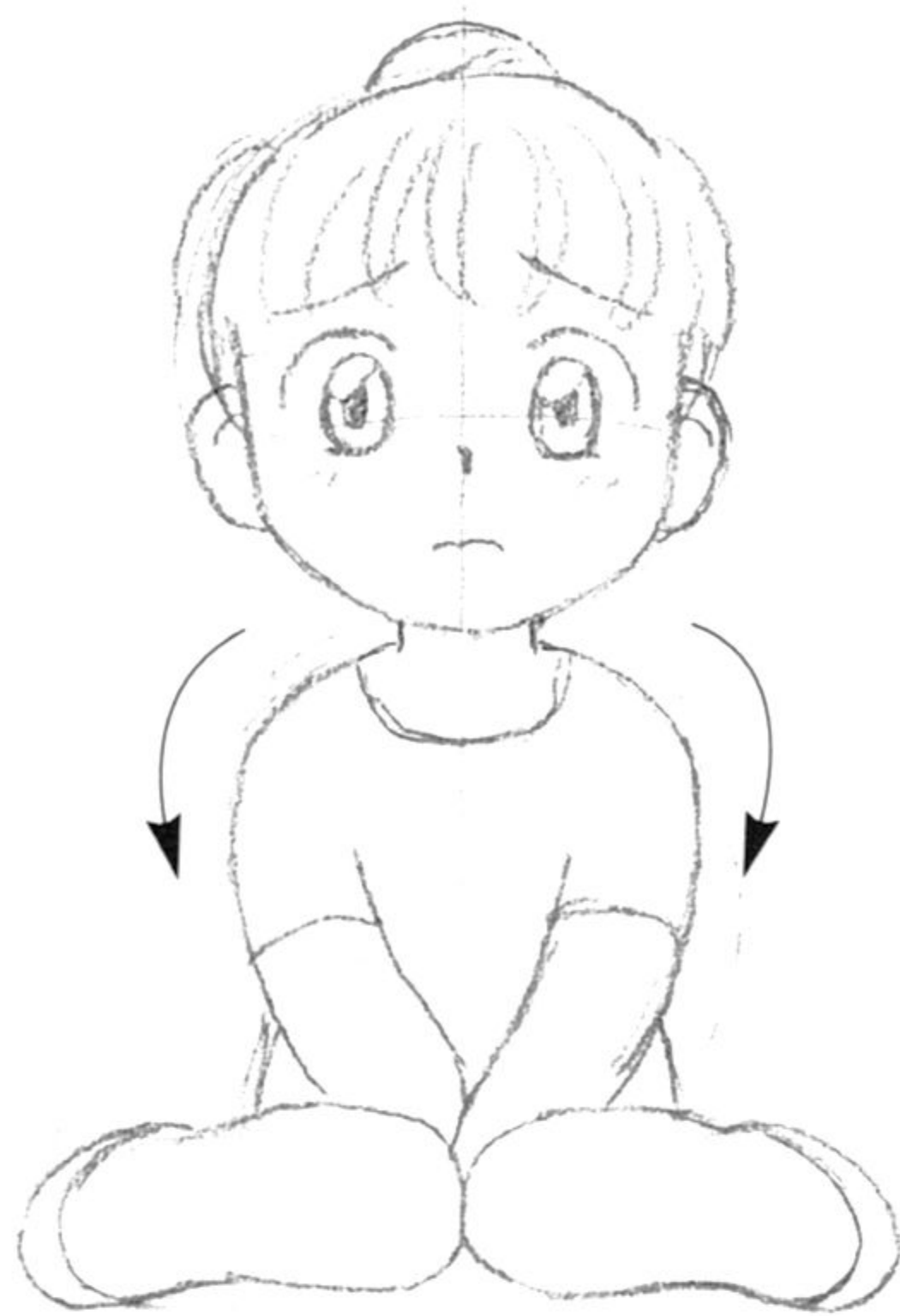


Happy roof-shaped eyebrows



Sad curved, roof-shaped eyebrows

Anxious Body Language: Intensifying Degrees of Anxiety



Mildly apprehensive: The shoulders sag, and the back rounds.



Anxious: The head gradually droops (example of turning inward). Draw the arms and legs pulling inward, closer to the body's center.



High anxiety: The arms and legs pull in close to the body's center, making the body smaller.



The rounded back, dark shadows, high angle perspective, etc. evoke the air of dejection and fretfulness.



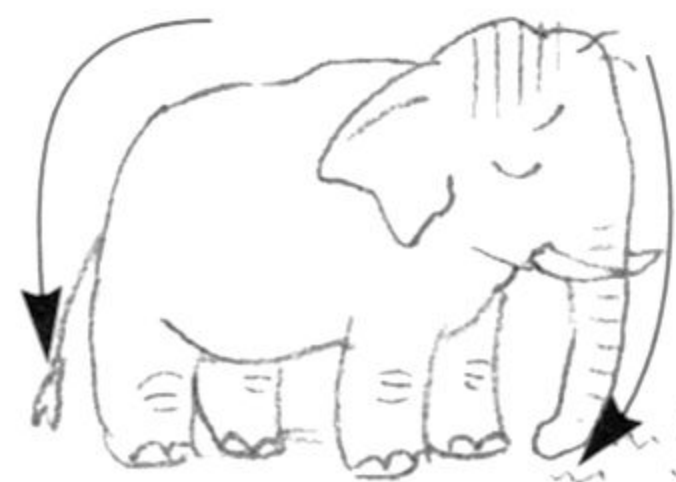
Showing the neck, arms, legs, and other body parts pulling inward toward the body's center projects an atmosphere of apprehension and lonely sadness, even if the figure is standing.

Unhappy Animals and Furniture

Animals and furniture are also drawn with rounded "backs."



The limp cup handle depicted using undulating contours creates a sense of dispiritedness.



Use inward turning forms.



The giraffe above displays the use of undulating contours and downcast forms.

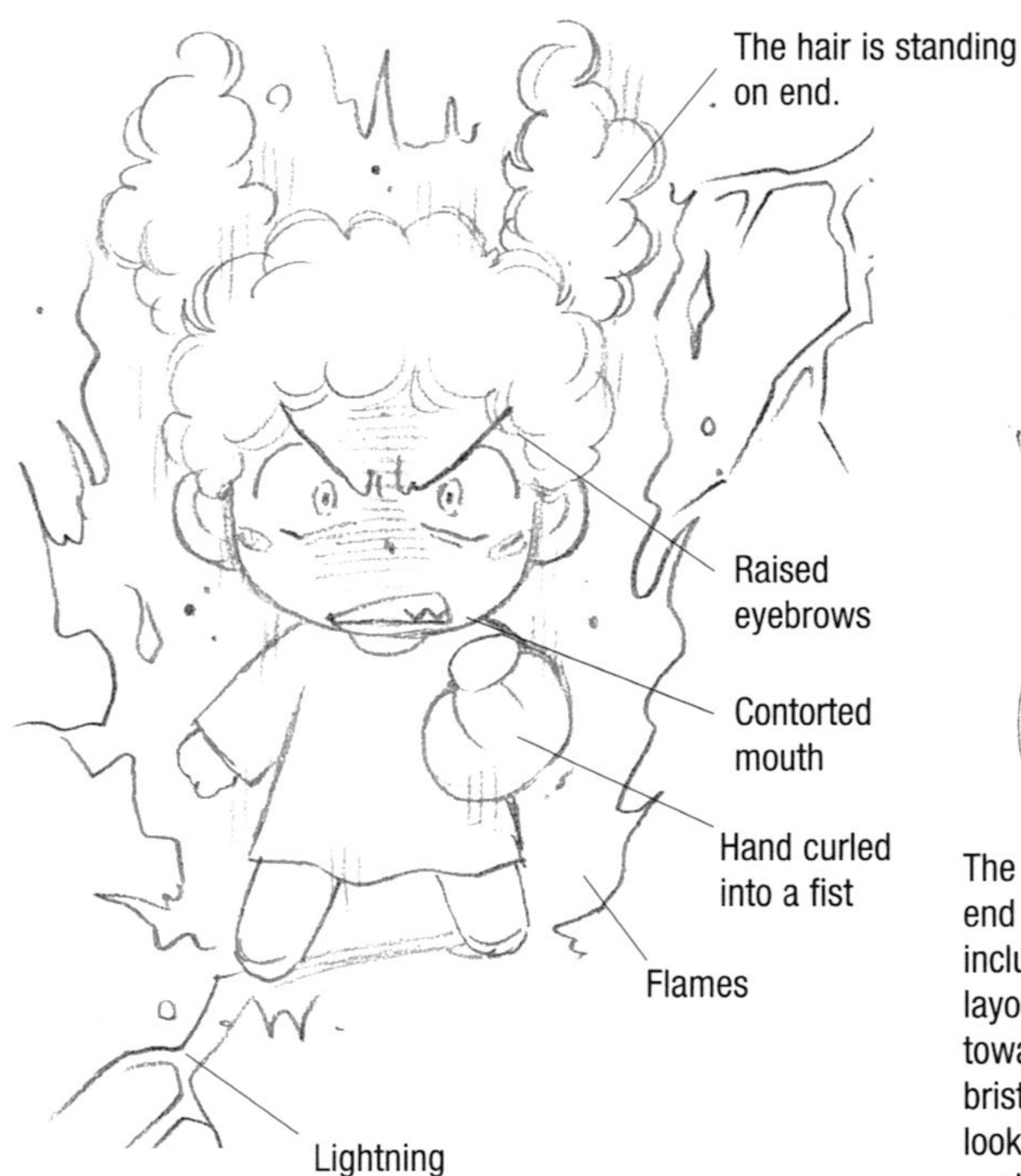


The above composition illustrates a stylized rendition of a gloomy emotional state: loneliness. The sad, curved roof-shaped eyebrows, the drooping shoulders, and the forward hunching posture all evoke a sense of forlorn. The feet are spread apart, reinforcing the sense of standing alone and overall lonely atmosphere. If the feet were positioned close together, the posture would appear apologetic rather than forlorn.

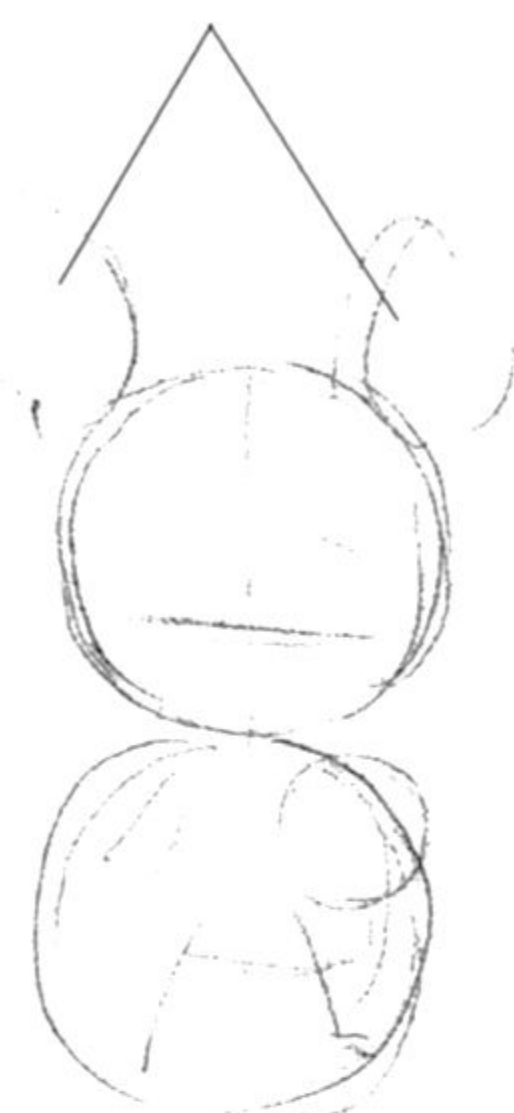
Anger

This section covers irritation, aggression, and other destructive emotional states.

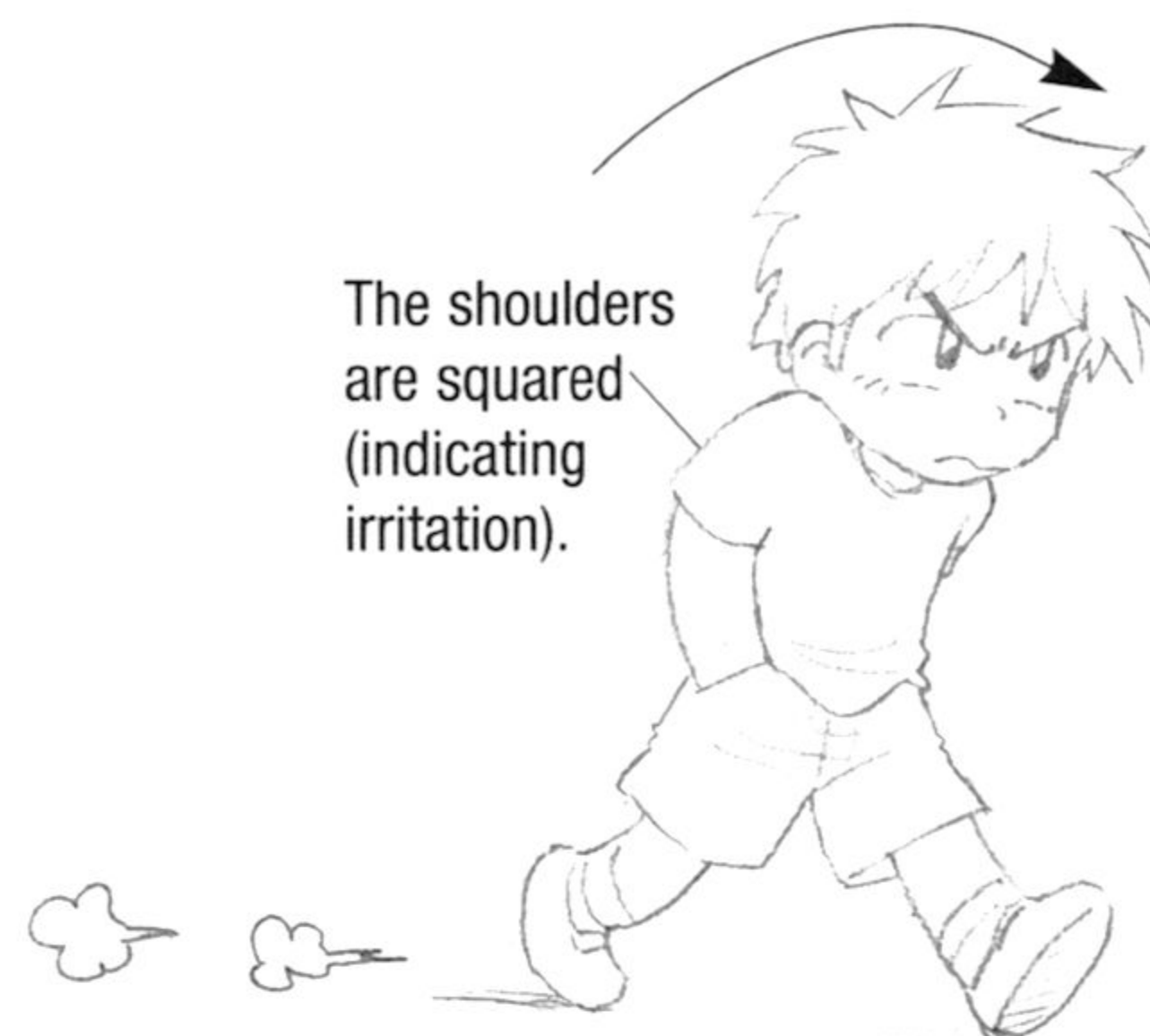
Note the forward facing, lurching posture.



Pigtails



The pigtails standing on end have already been included in the pose layout. Show awareness toward using on-end or bristling and forward-looking or confrontational postures when drawing angry characters.



The above shows a character walking around seething, annoyed, or irritated. Energy generated from such feelings of anger causes us to assume outward facing or confrontational postures. Make an effort to adopt "angry" body language in your artwork, such as walking on the toes, squared shoulders, etc.

Common Icons Used to Portray Anger

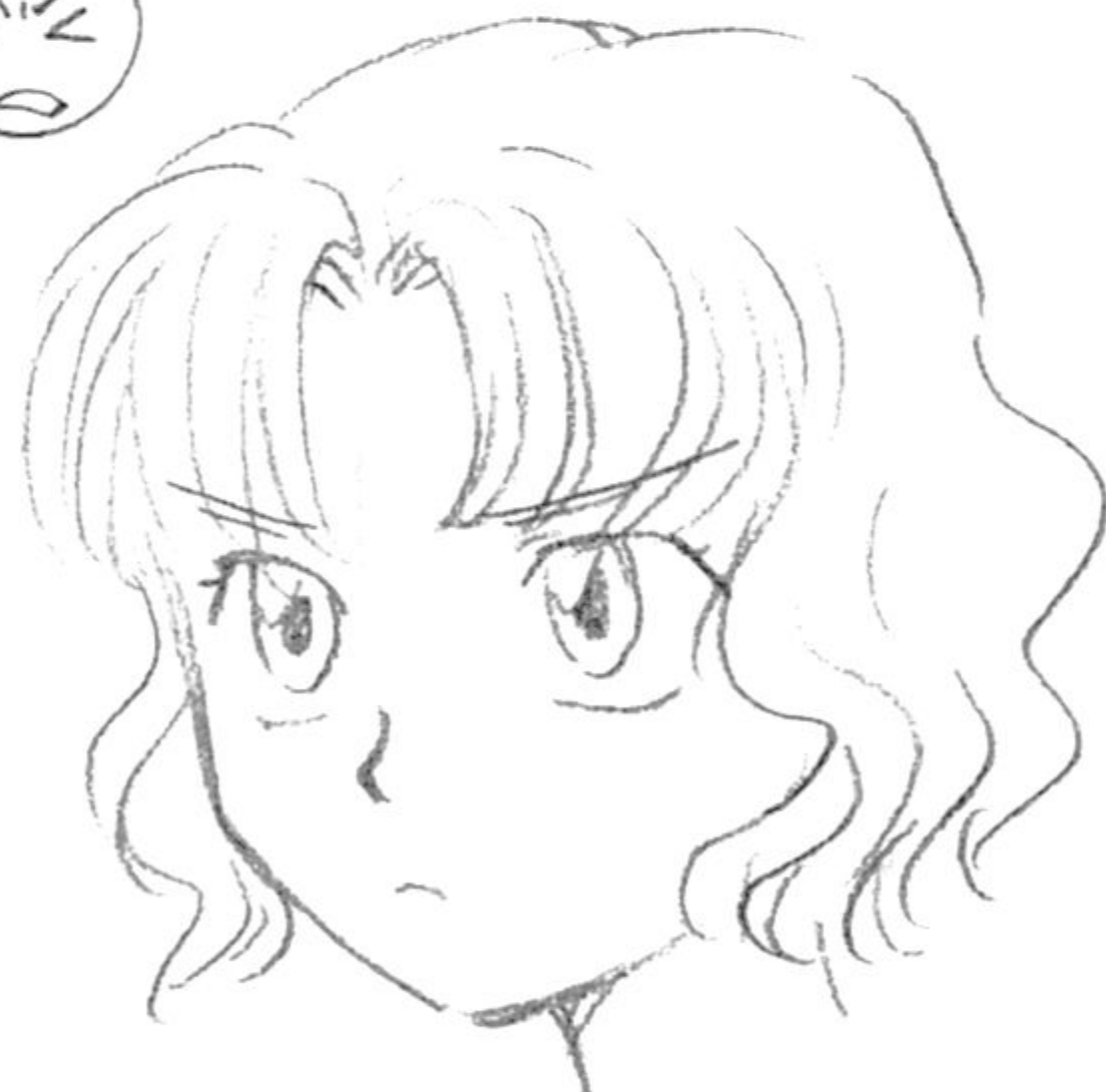


Angry Eyebrow Effects

Use upwardly angled eyebrows to portray discontent, irritation, fury, and other angry emotions.



Furrowed brow



Malcontent: Mild irritation



Angry icon



Annoyed: Increased irritation



Horns



Rage



Lightning



Explosive fury



The greater the number of lightning icons drawn, the more intensely furious the character is.



Numerous seething icons suggest extreme rage.

We tend to tense our eyebrows when angry, causing a furrow to develop in the brow.



Angry Body Language: Using the Posture to Express Directionality



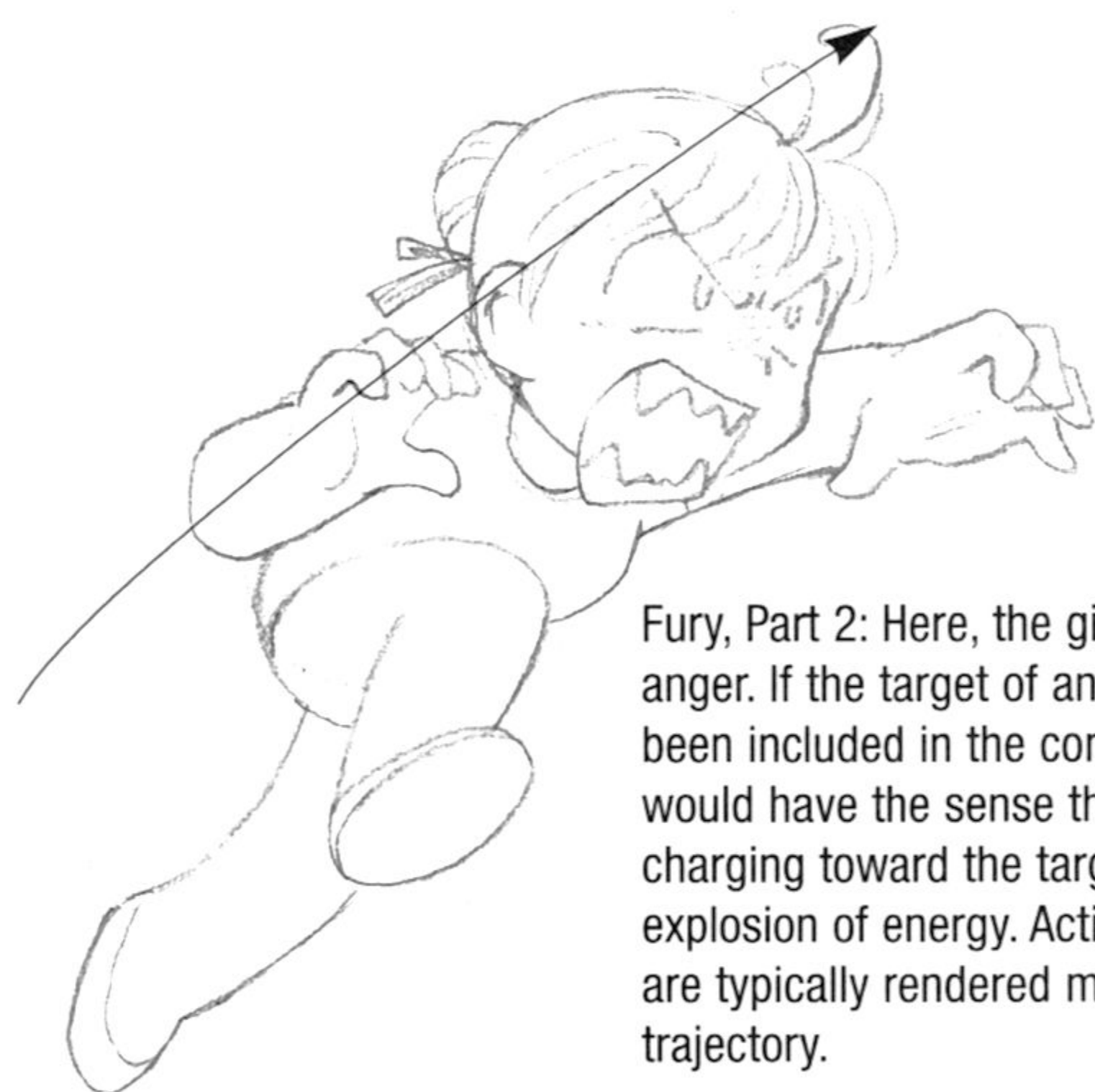
Discontent: The feet shift apart, and the arms cross, creating a triangular silhouette. This projects an angry edginess.



Growling: The forward leaning posture suggests that anger has boiled to the surface. The head juts forward.



Fury, Part 1: The above illustrates venting rage. The raised chin and face indicate that the girl is yelling. The character's entire body portrays explosiveness.

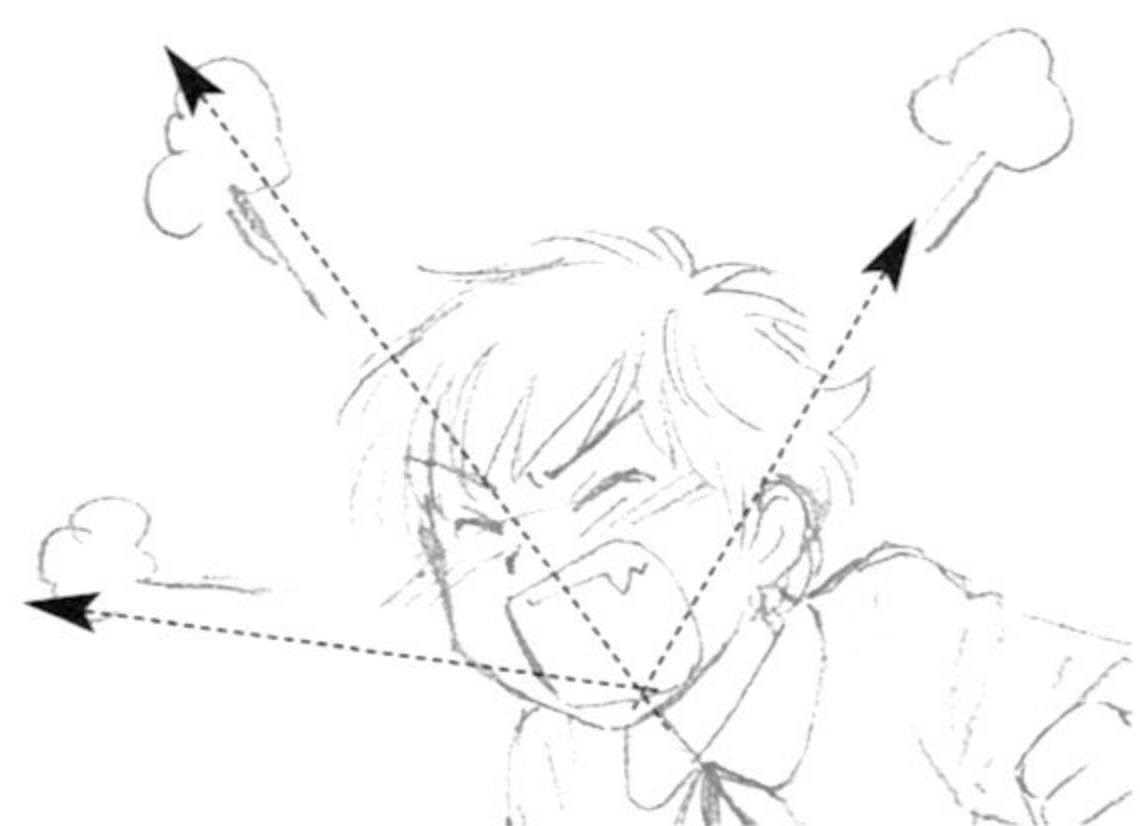


Fury, Part 2: Here, the girl leaps forward in anger. If the target of anger (enemy) had been included in the composition, we would have the sense that she was charging toward the target with an explosion of energy. Actions such as this are typically rendered moving on a straight trajectory.

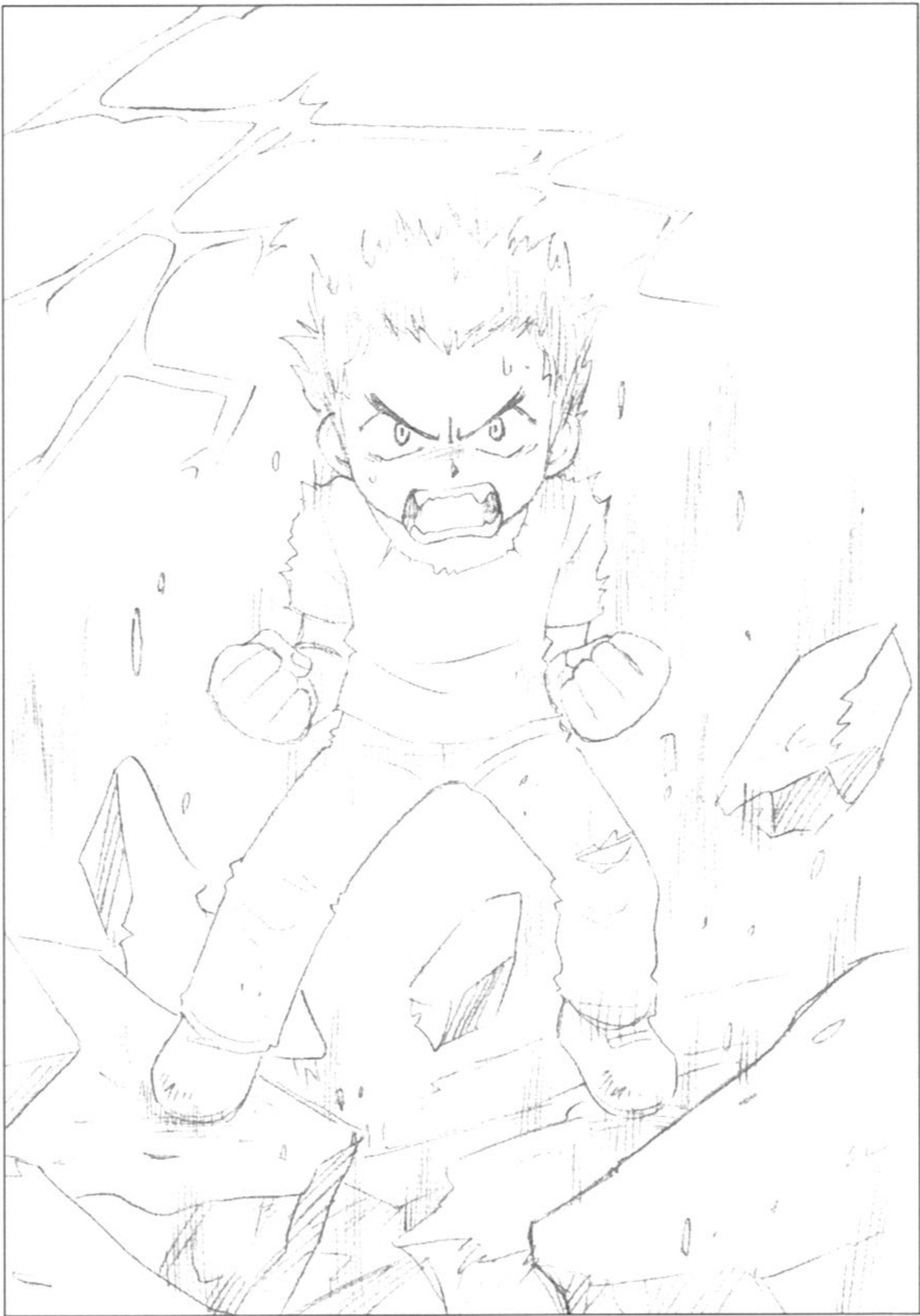
Portraying Directionality
(Portraying the Direction of Movement)



Forward leaning postures have directionality. Merely drawing the character with a tilted posture portrays angry movement.

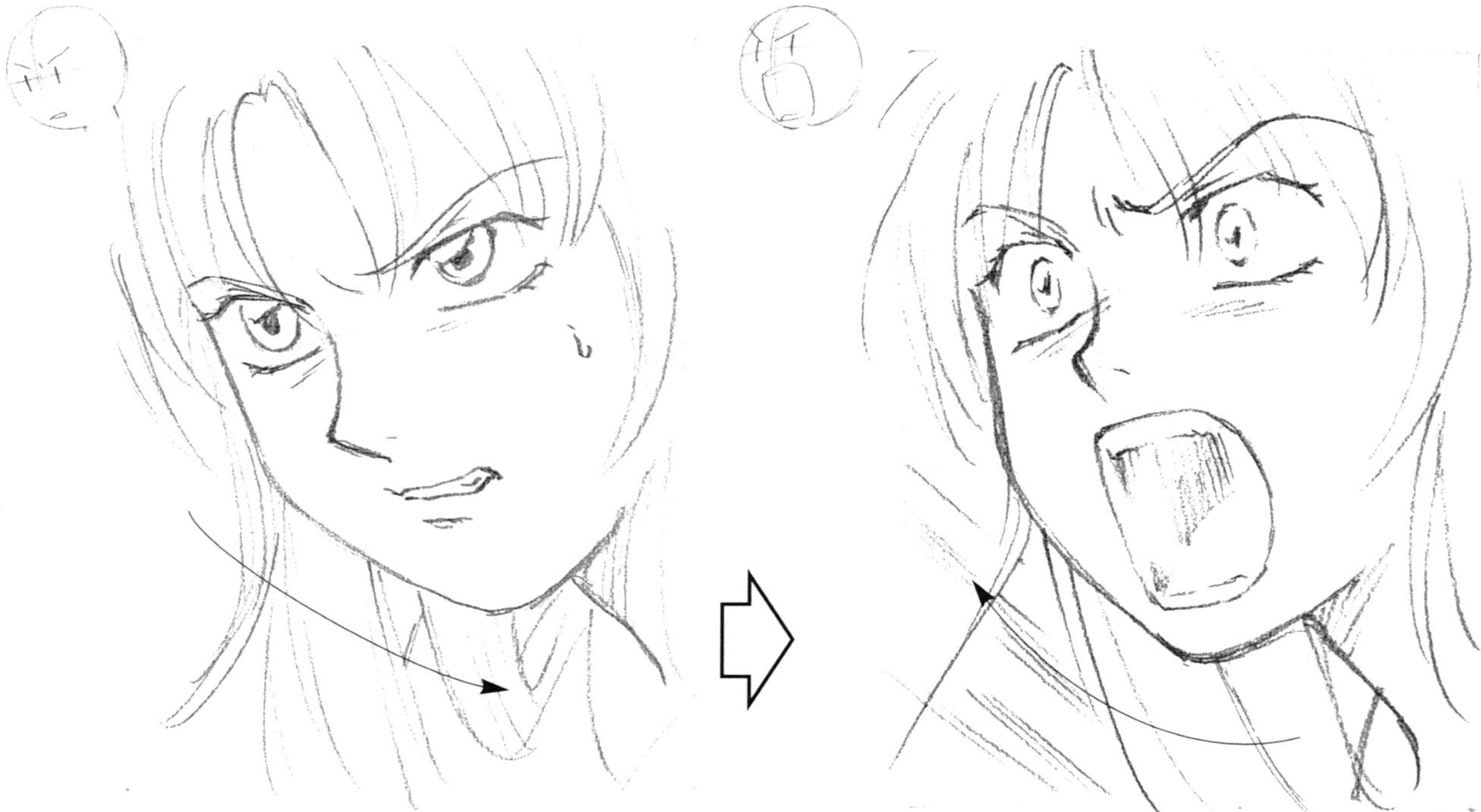


Seething icons should be drawn emitting from the body's center. Position the icons in a radiating pattern.



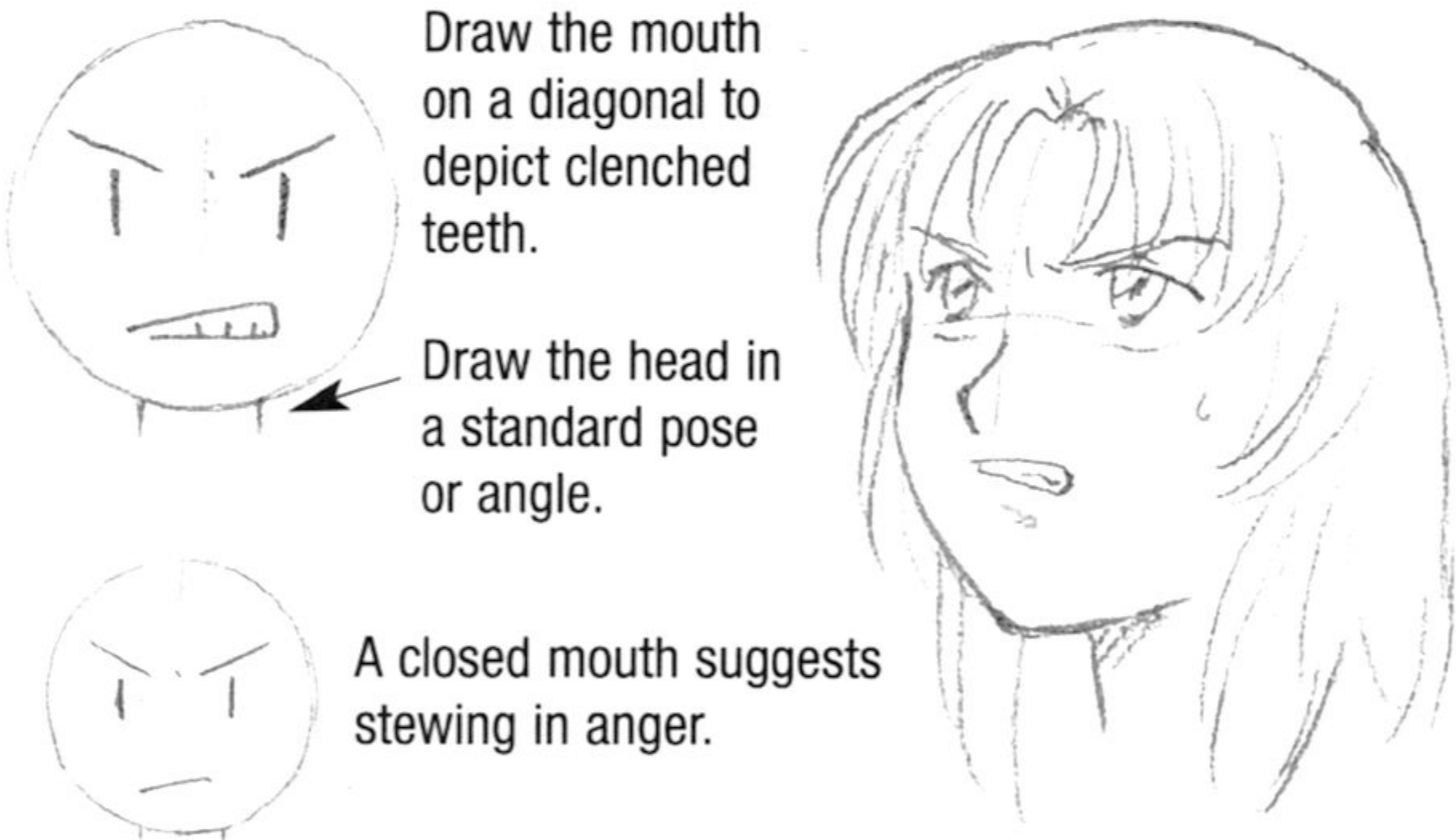
The above composition shows a stylized portrayal of fury. Energy emitted in an upward direction is commonly used to suggest anger, justifying the expression "boiling with rage." Draw the hair standing on end and stiff, squared shoulders. The widely spread feet, the bent arms positioned at the hips, the forward lurching posture, the bent neck, and forward glaring expression are all expressions of tension that accompany "anger."

Portraying Anger and Shouting Vertical motion in the face is key to portraying anger in close-ups.



The teeth clench, and the face turns down, indicating building anger.

When shouting or exploding in anger, the head rises and faces forward.

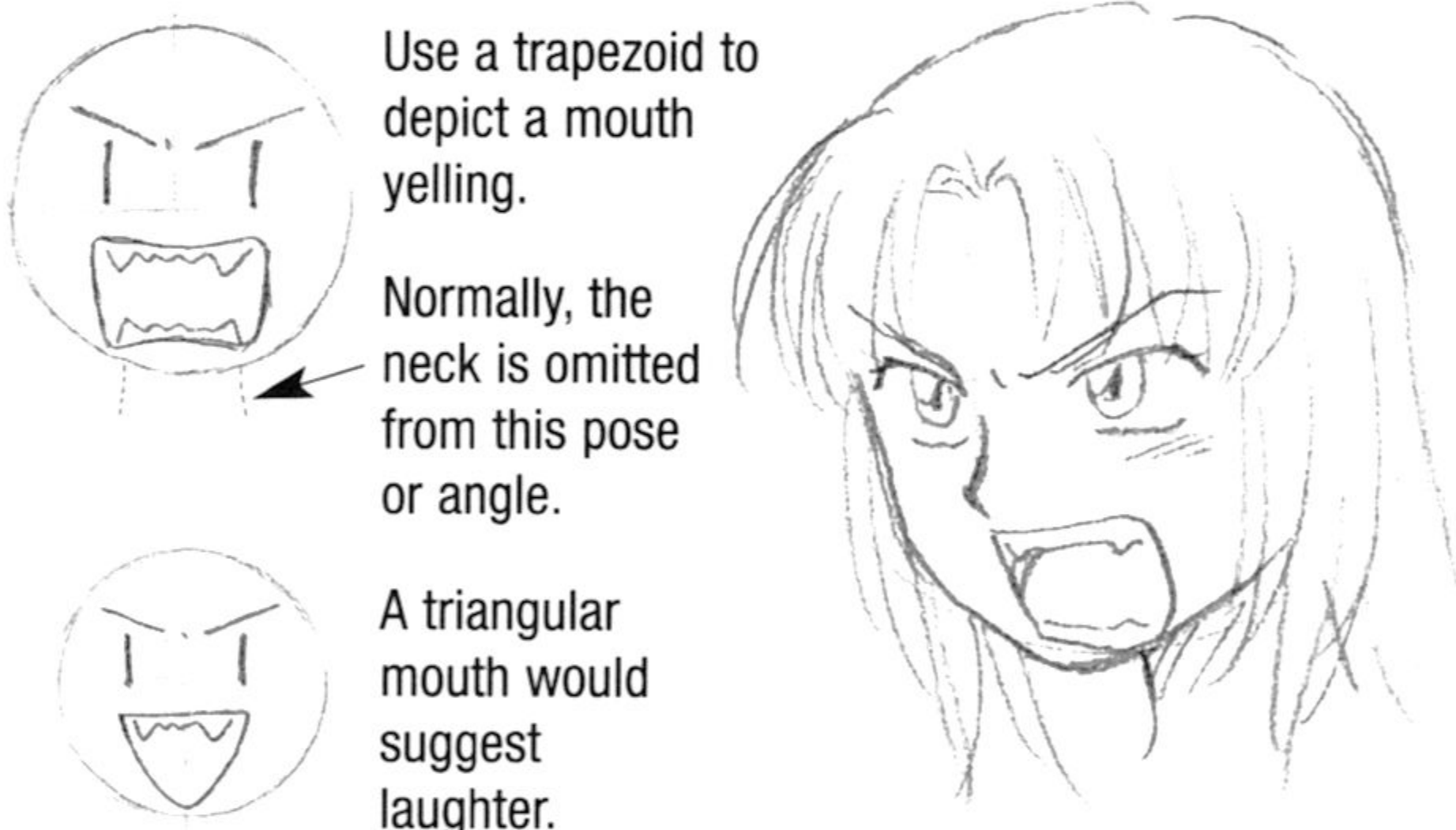


Draw the mouth on a diagonal to depict clenched teeth.

Draw the head in a standard pose or angle.

A closed mouth suggests stewing in anger.

Looking up and clenching the teeth suggest suffering endurance.



Use a trapezoid to depict a mouth yelling.

Normally, the neck is omitted from this pose or angle.

A triangular mouth would suggest laughter.

Showing the head facing downward suggests that the character is speaking in anger.

Portraying the Inside of an Open Mouth



Merely shouting: Draw the upper and lower rows of teeth.

Yelling in moderate anger: Draw the upper and lower rows of teeth with lines as if threads connected some of the teeth.

Bellowing in extreme anger: Use hatching to darken the inside of the mouth. This rendition carries the most impact.

Surprise/Shock

The portrayals covered in this section suggest a mixture of complex emotions: being caught by surprise, fear, joy, etc.

The hair stands on end.

Special effect portraying shock

The eyes are large with tiny irises and pupils.

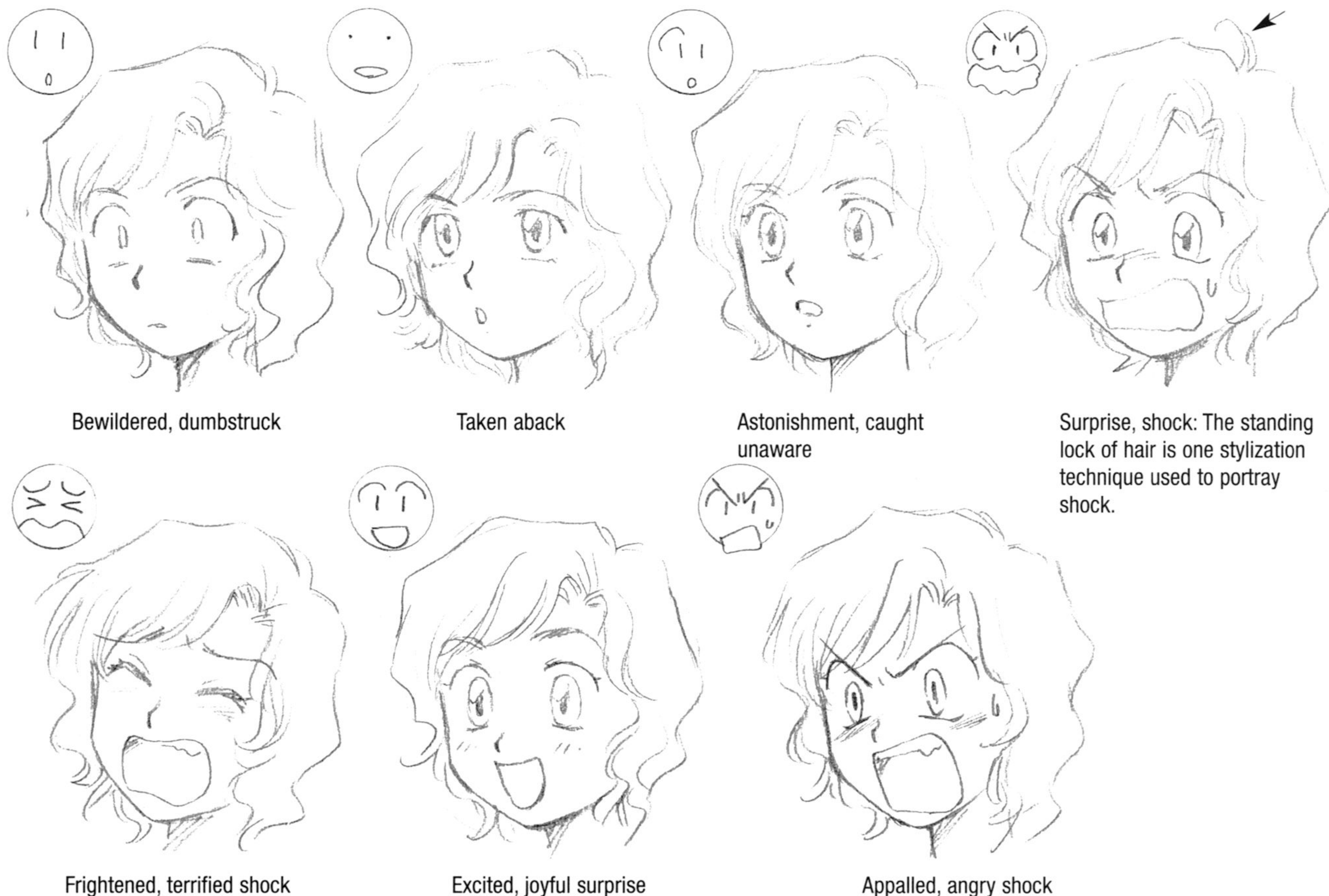
Shouting (wide-open mouth)

Leaping off the ground

As seen in the pose layout, radiating motion is the key to portraying surprise. The arms are extended out, while the girl jumps up. The hair standing on end is yet another element contributing to the overall radiating forms.

Surprise: A Variety of Mixed Emotions

Surprise reflects a variety of emotions, including joy and anger.



Surprised Body Language

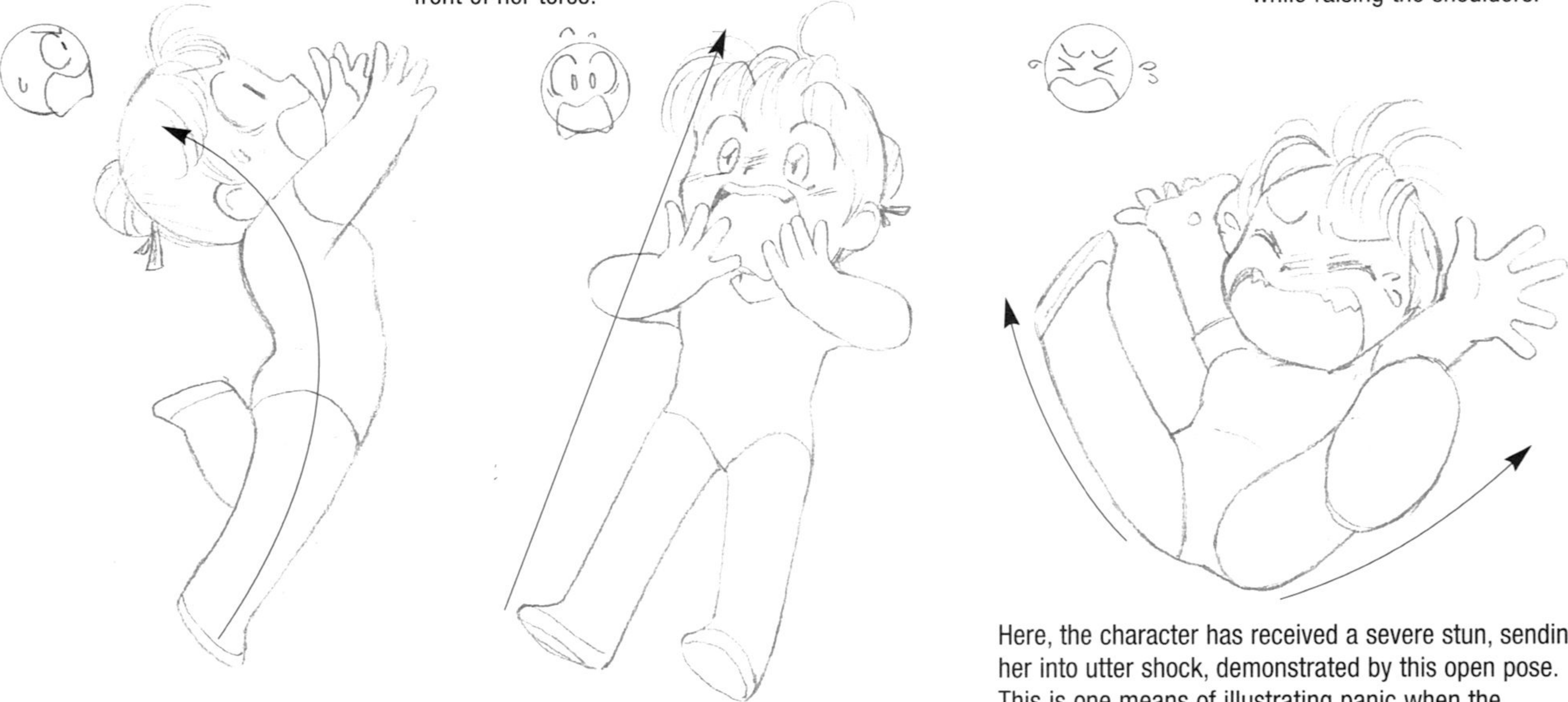


Surprise is reflected in almost every aspect of the above character carriage, from the way his body bends forward to the way he leaps back to avoid the snake and even in the stylization of his face. Beads of sweat and tears are other potentially effective touches.

Here, the character leans slightly forward in mild surprise. She holds her arm in front of her torso.

In this expression of intense surprise, the character now pulls back her hips while spreading both arms broadly.

To portray delighted surprise, as illustrated here, show the figure leaning back slightly while raising the shoulders.



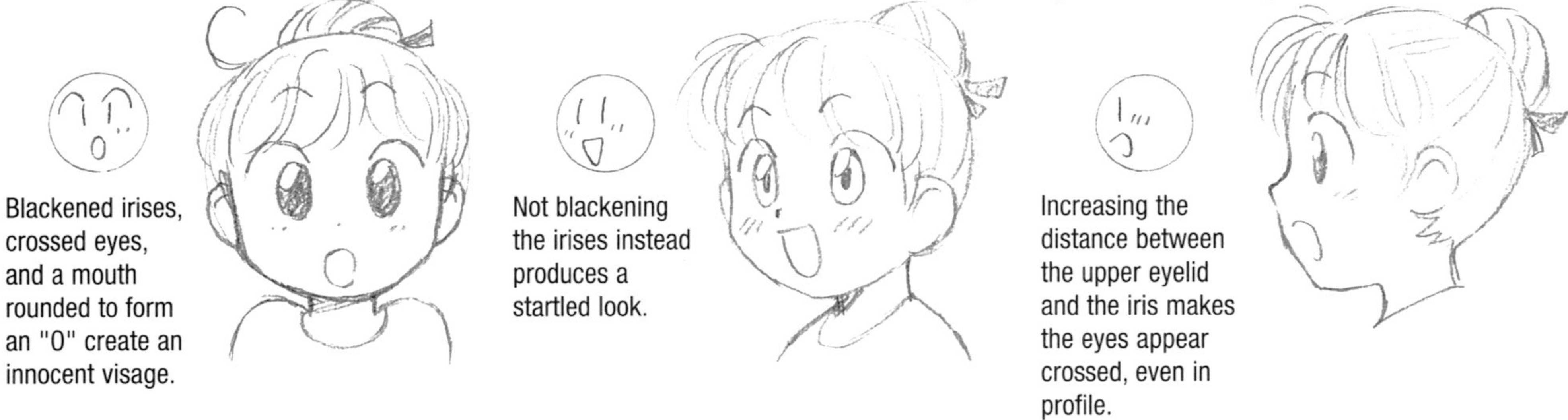
The above shows the character arcing her back as she reacts with fear. She has been taken unawares by something from behind, causing her to freeze in terror. The result is a backward leaning pose with the arms extended over the head.

The straight lines demonstrated in this figure result from the character stiffening as a tremendous shock bowls her over. The body is stiff and seems about to capsize. Artists will often show the character fainted in the next panel.

Here, the character has received a severe stun, sending her into utter shock, demonstrated by this open pose. This is one means of illustrating panic when the context does not permit having the character faint.

Adorable Expressions of Surprise

Show the eyes cross and the cheeks blush to make the character appear endearing. Note that characters are made to look cute in their surprise only in situations calling for "mild astonishment."



Blackened irises, crossed eyes, and a mouth rounded to form an "O" create an innocent visage.

Not blackening the irises instead produces a startled look.

Increasing the distance between the upper eyelid and the iris makes the eyes appear crossed, even in profile.

Surprise Causing the Heart to Leap from the Chest

The three primary elements here are the asymmetrical eyes, large mouth, and tears.



Linear movements



The limbs extend away from the body as if on a flat plane as the figure stiffens. This reaction still allows the character to look adorable.



Arcing movements



Here, the character has been startled by something from behind, so the figure arcs back in an exaggerated manner. The character's original, sweet prettiness has been lost.



Linear and arcing movements



This illustrates an extreme, stylized reaction. The original appearance of any character is shattered in this radical of a rendition.

Recovering from Surprise



This forward leaning pose is a posture of relief after having received a mild shock.



The inward directed pose illustrated above reflects exhaustion after having received an overwhelming shock, causing the release of intense energy.



After receiving a deathly shock, the character collapses limply on the ground with her limbs sprawled in four directions.



The above shows a figured flopped down limply. The upper body arcs back as the character sits down.



The above, stylized rendition of surprise shows the character jumping. Although the head tilts slightly back, the neck is still not visible, as the character is actually ducking her head. This was intended to evoke a sense of the character stiffening in surprise. Not only the upper body, but the extended fingers and the hair—the entire figure arcs back subtly, intensifying the atmosphere of shock.

Postures That Convey a Gloomy or Dreary Emotional State: Turning Inward (Introversion)

1:2 Head-to-Body Ratio



The body is curled into a ball, and the head faces down, conveying extreme dejection.



Crawling on all fours with the face directed down conveys a sense of gloom and disappointment.



The above figure is crouched with a rounded back and is hugging the knees. That we cannot see the face alone projects a gloomy atmosphere.



This figure stands limply with a rounded back and with the head facing down. This is the most popular pose for suggesting disappointment.

1:3 Head-to-Body Ratio



1:4 Head-to-Body Ratio



Effects of the Head's Direction

Showing the head tilted down with a downcast gaze alone projects an air of glumness.



Drawing the head facing up creates a bright, cheerful atmosphere.

Poses That Convey Cheerfulness: Turning Outward (Extroversion)

1:2 Head-to-Body Ratio



Standing with a tall, straight back and raised chin reinforces the sense of a positive mood.



Standing with an arched back reflects an idealistic, hopeful, aspiring, robust attitude.



Stretching conveys the sense of being relaxed, tranquil, and cheerful.



Jumping and other images of leaping or soaring constitute one means of portraying delight.

1:3 Head-to-Body Ratio



1:4 Head-to-Body Ratio



The Effect of Cocking the Head

Tilting the head is another stylization technique.



Happy



Sad



Angry



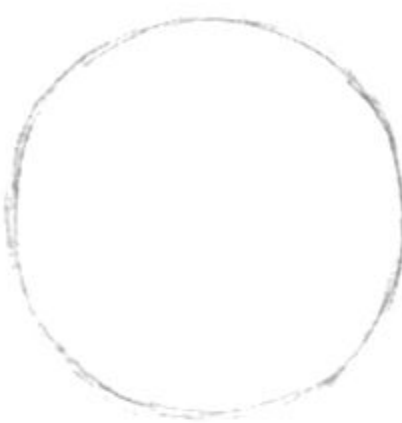
Surprised

Exaggerating with Facial Shadows

Facial shadows are a technique that allows the artist to accentuate dips and bumps on the face's surface in order to heighten the emotional state projected. Facial shadows are primarily used with 1:4 head-to-body ratio *chibi* characters or characters with attractive proportions drawn at a ratio of 1:5 or above.

The Fundamentals in Using Shadows to Suggest Three-Dimensionality

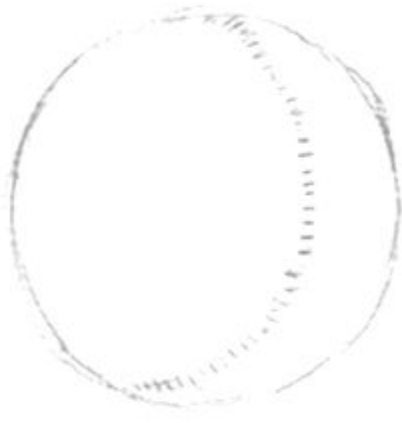
Shade the face, maintaining awareness of the effects of lighting (where shadows form as a result of the manner in which light strikes the face).



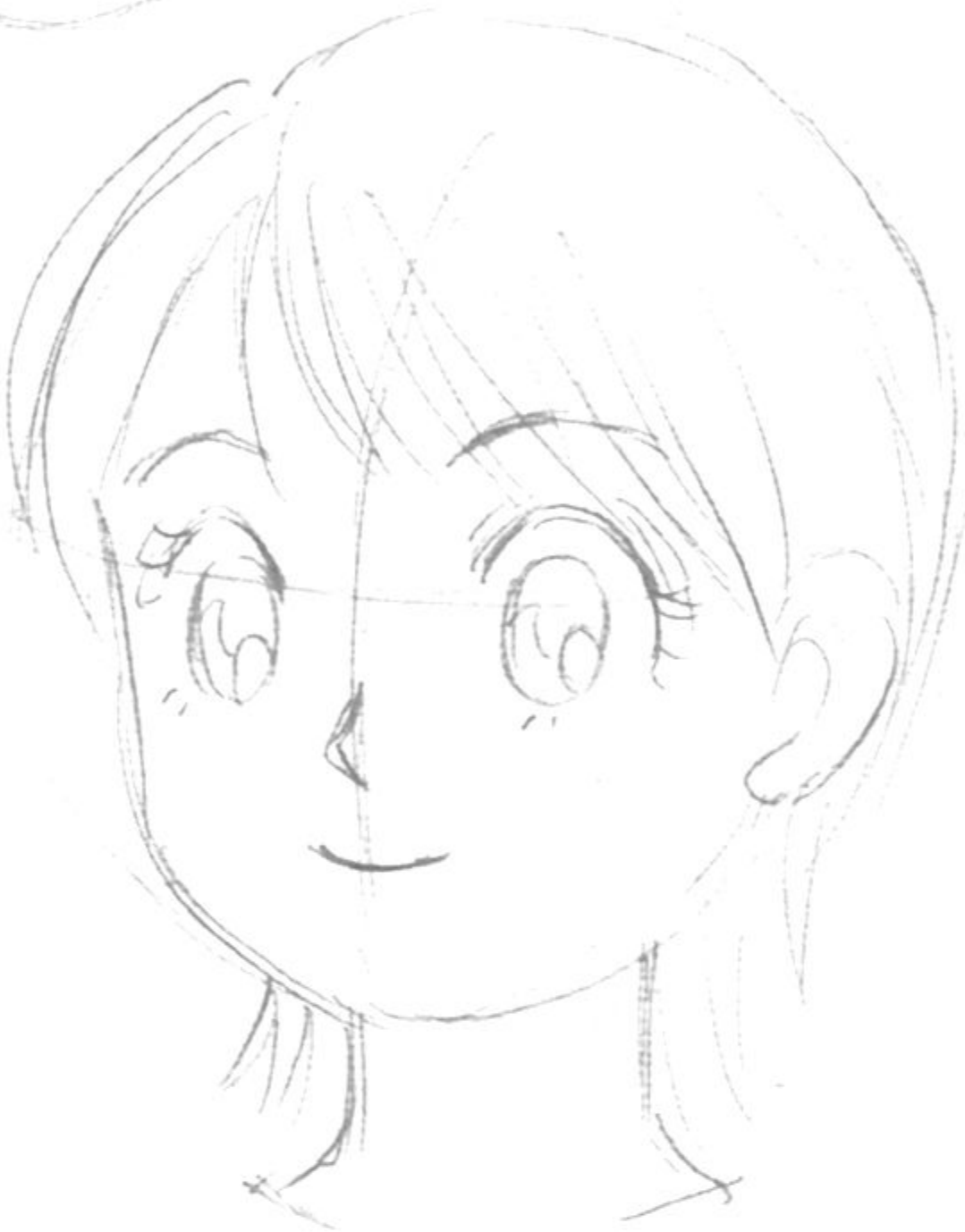
Basic circle: The illusion of a sphere cannot be created without shading.



The addition of shading turns the circle into a sphere.



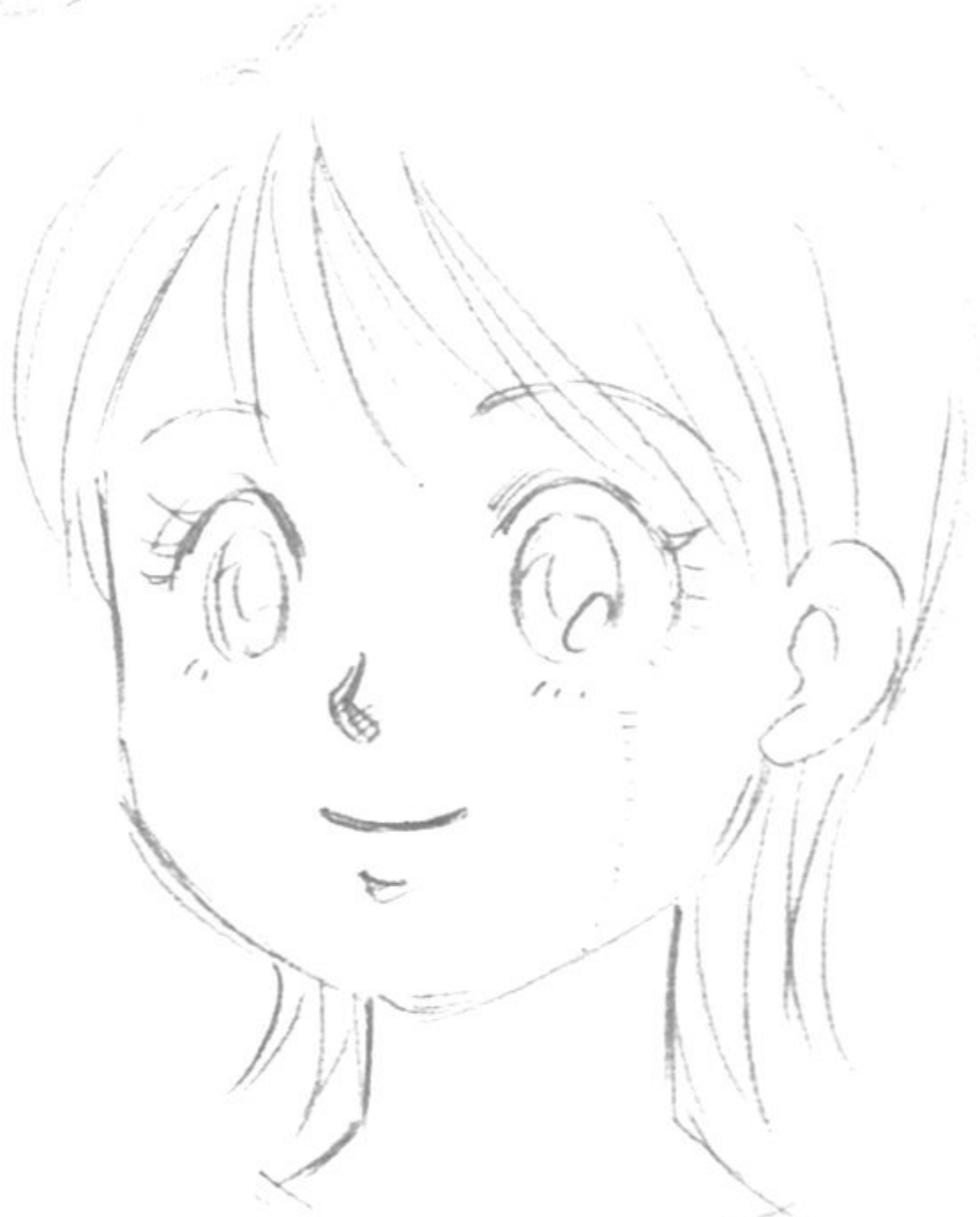
To the left is a sphere with the shadow's boundary rendered in hatching. This is an abstraction technique that may also be used with *chibi* characters.



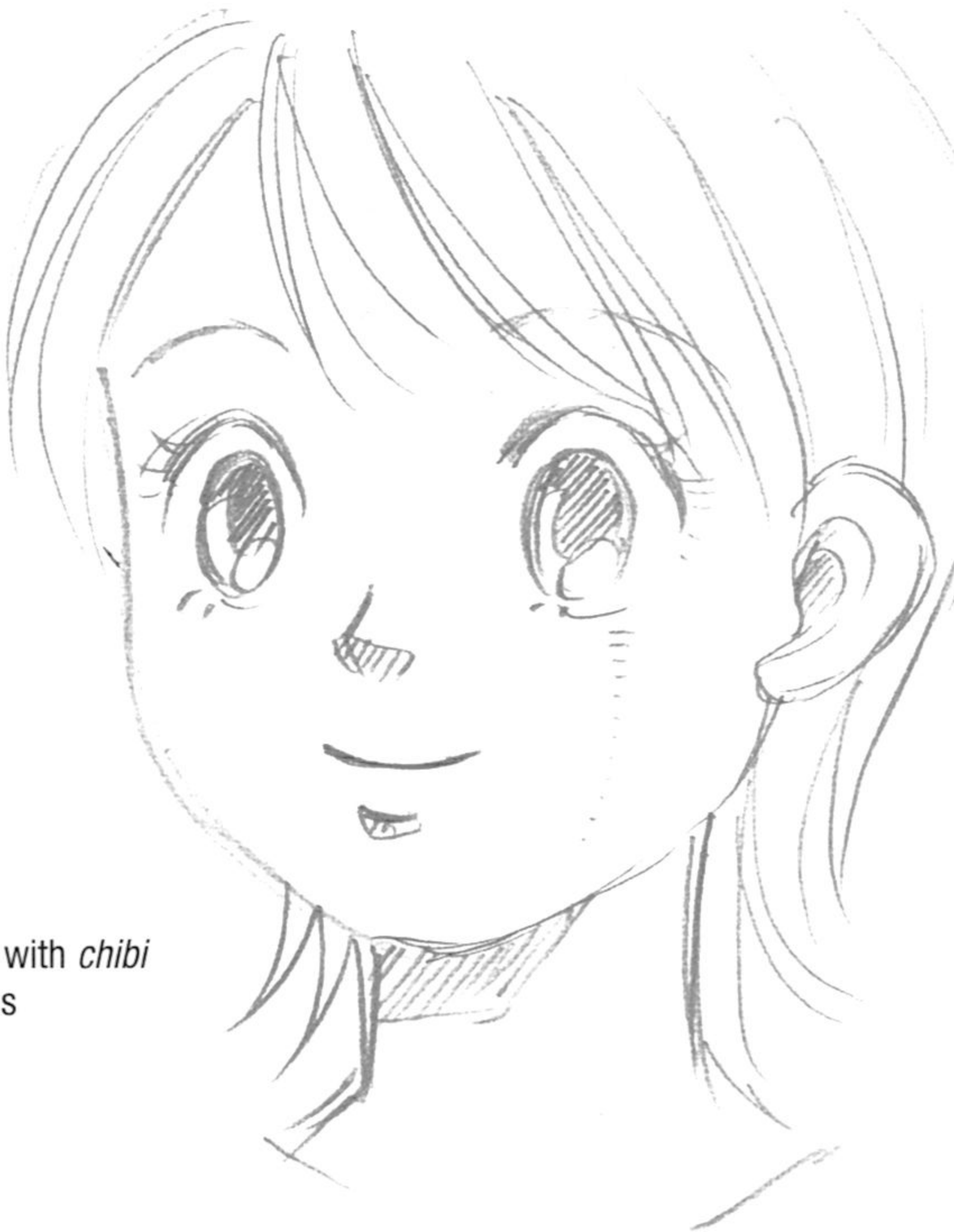
Basic face: The basic face has no shadows.



Adding shadows underneath the hair, nose, and jaw; to the side of the face; and to other areas gives the face a sense of volume.

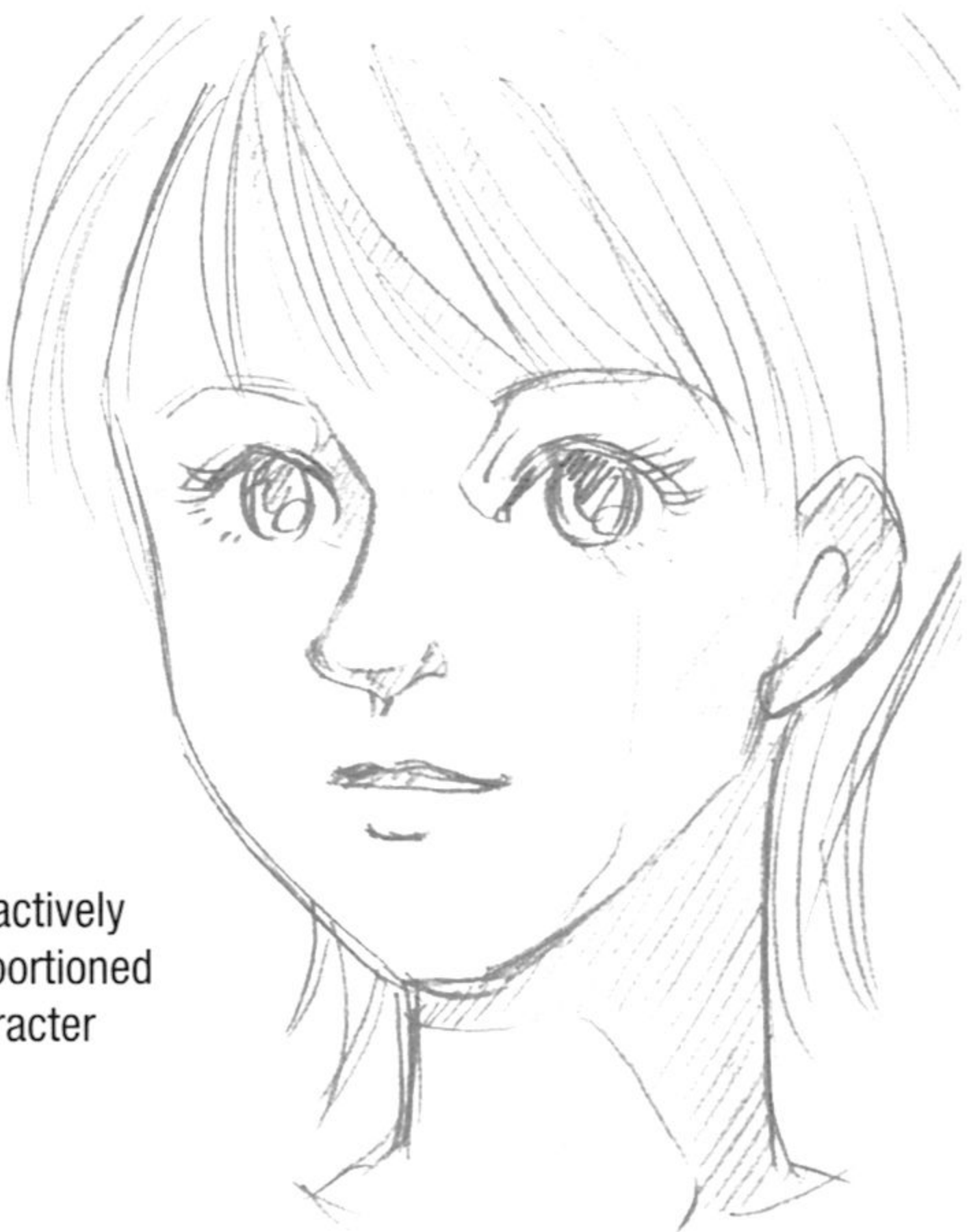


Using hatching to create a shadow boundary to the cheek adds a charming touch to the character's face.



Character with *chibi* proportions

The abstracted shadows seen above underneath the girl's nose and chin may be used with *chibi* characters as well.



Attractively proportioned character

The shadows illustrated above work well with realism-style *manga*.

Using Facial Shadows to Enhance Emotions

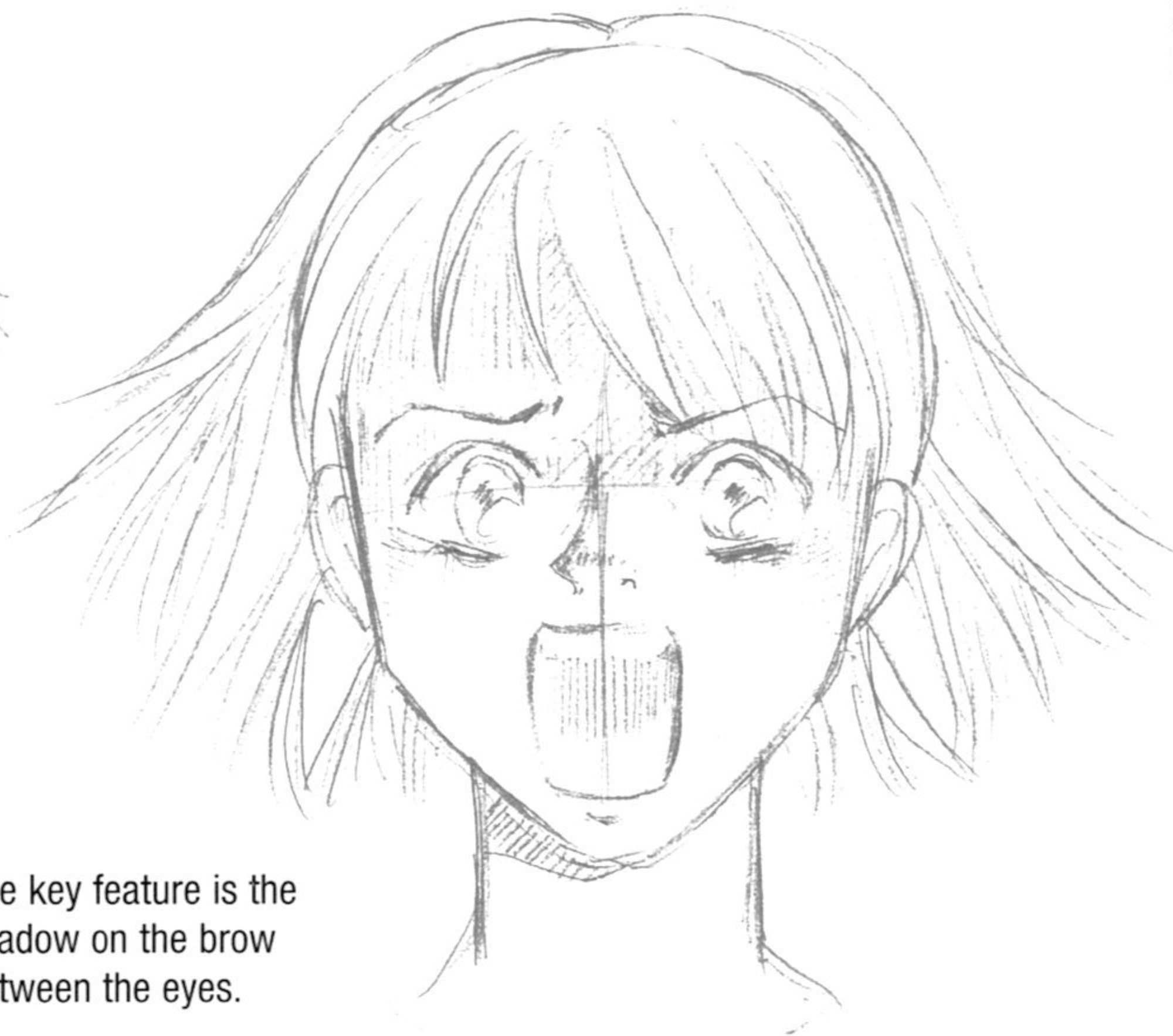
Facial shadows are used to heighten intense emotions, such as shock, anger, anxiety, and fear.

Shadows Portraying Anxiety and Fear

The following shadows were applied assuming a low-angled light source.



Front view
Without shading



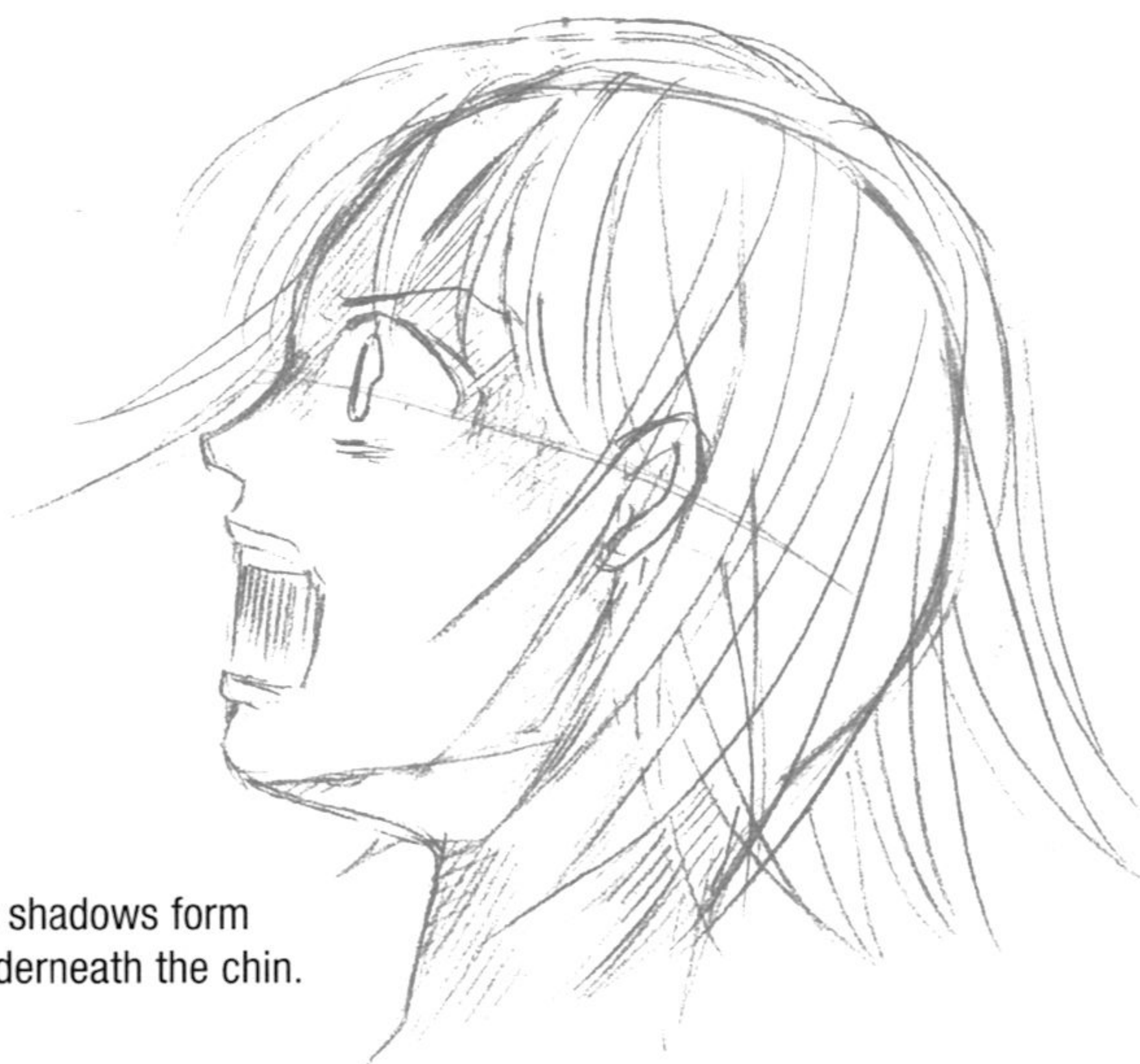
The key feature is the shadow on the brow between the eyes.



On characters drawn at a 1:4 head-to-body ratio, facial shadows are primarily rendered using vertical lines.



Profile view
Without shading



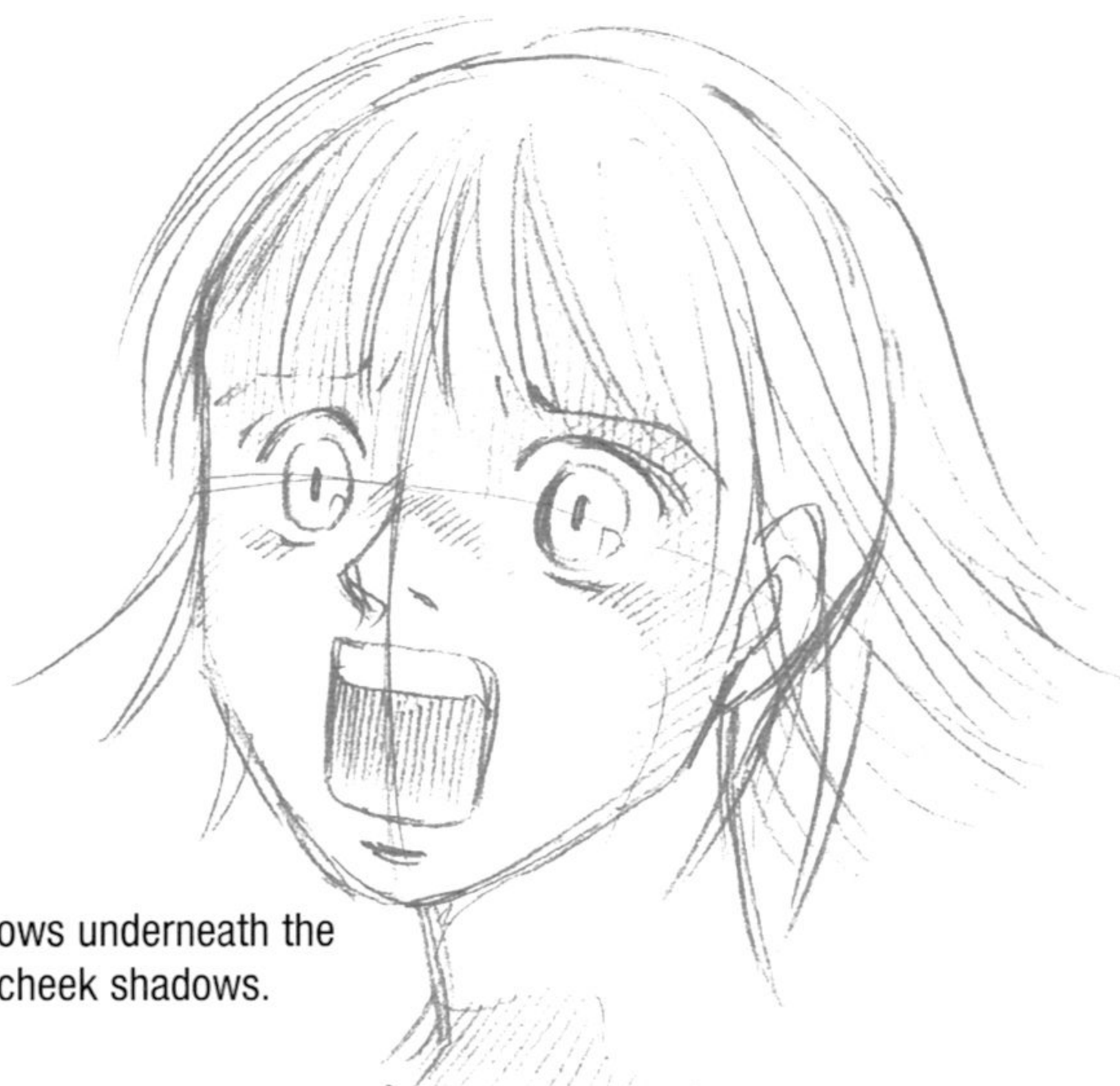
No shadows form underneath the chin.



Darkening the mouth's interior generates a creepy atmosphere.



3/4 view
Without shading



The shadows underneath the eyes are cheek shadows.



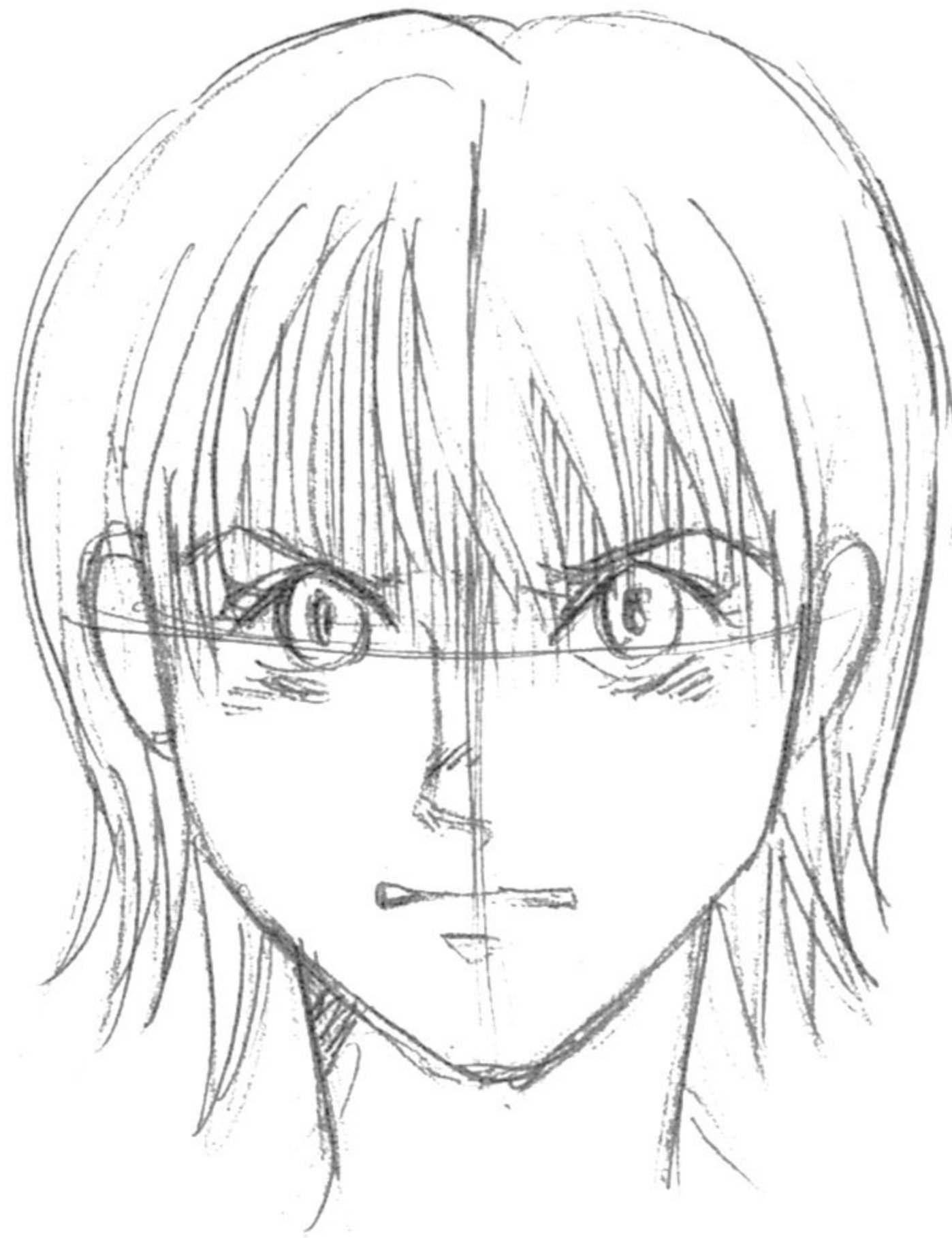
Solely adding shadows underneath the eyes or to the forehead produces sufficiently effective results.

Shadows Portraying Anger

The following shadows were applied assuming a light source that lit 70% of the face from above and another light source that lit 30% of the face from below.



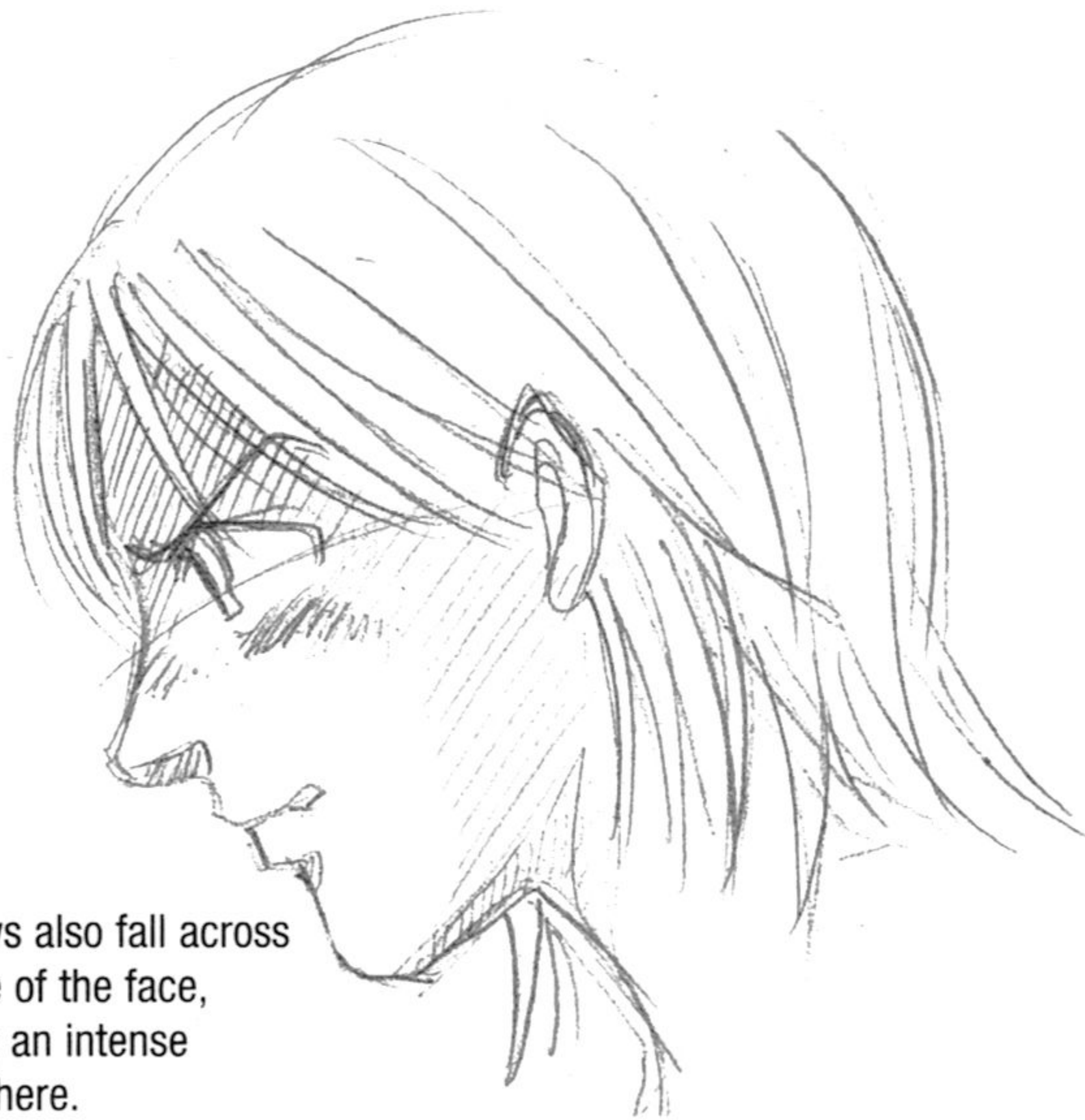
Front view
Without shading



This 1:4 ratio character displays shadows underneath the eyes.



Profile view
Without shading



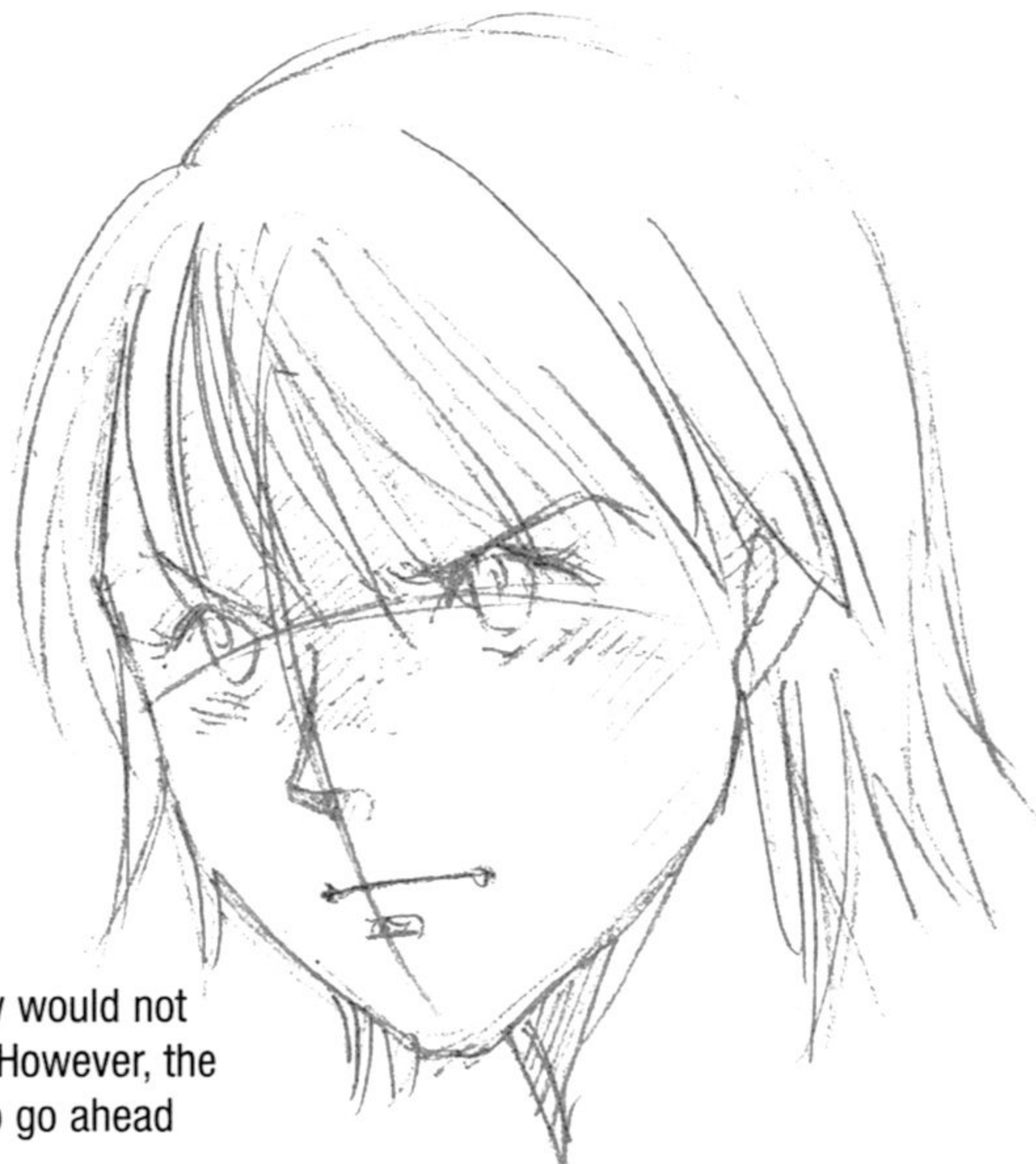
Shadows also fall across the side of the face, evoking an intense atmosphere.



This face shows a shadow added to the bridge of the nose. Shading the cheeks can make the character appear excessively cute, so apply cheek shadows with caution.



3/4 View
Without shading



Realistically speaking, a shadow would not form on the bridge of the nose. However, the shadow is an effective touch, so go ahead and add it to your own work.



Hatching on the upper bridge of the nose is convincing, as it also may be construed as a shadow formed by the furrowed brow.

Dramatizing Shadows

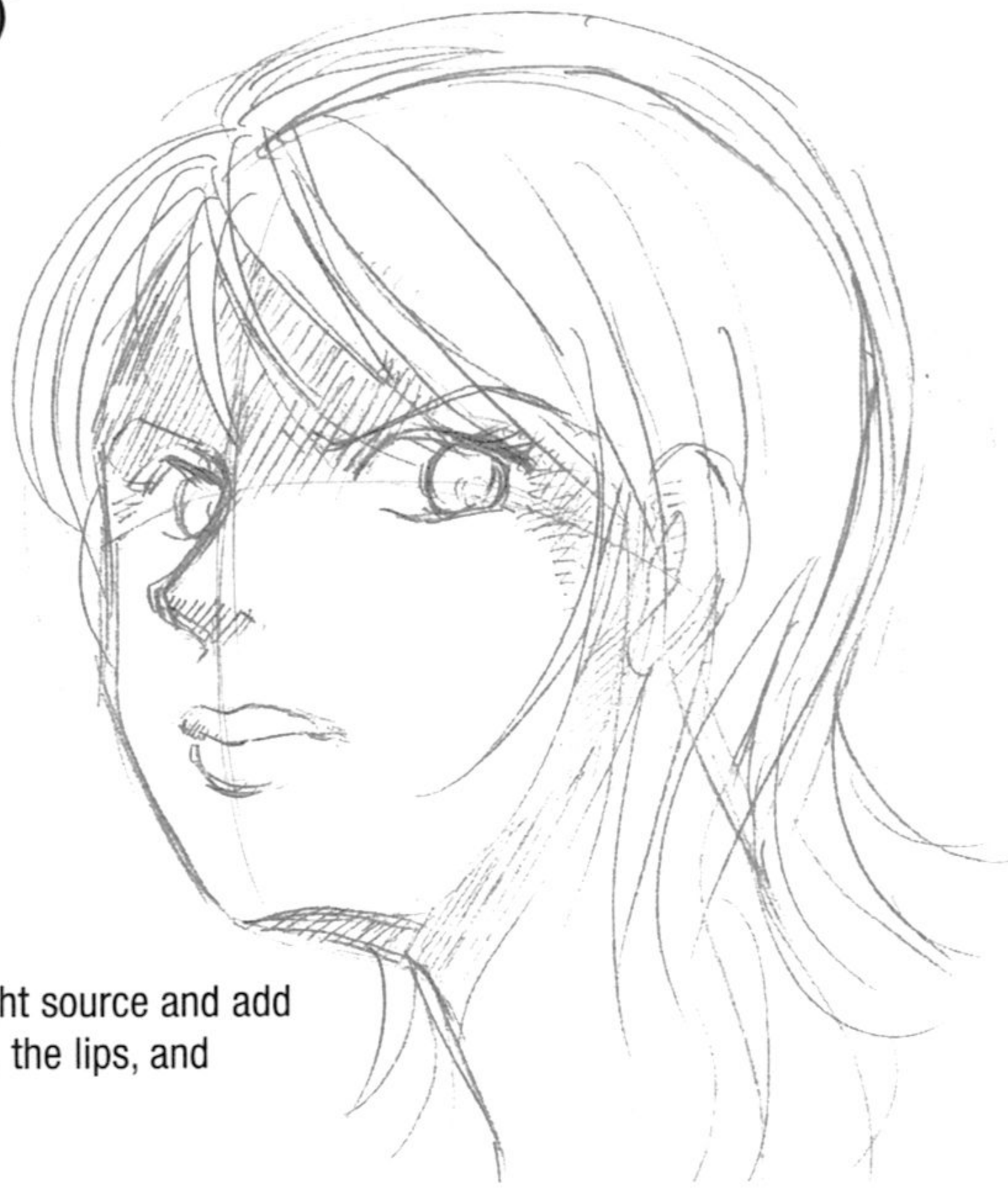
These shadows are combined with the face's angle of composition to create the desired effect and are used to dramatize glaring (to heighten the mood), shouting (to intensify the sense of anger), glancing back anxiously (to intensify the sense of apprehension), and other contexts.

Glaring (Heightening the Mood)



Low angle composition

Show the face lit from an above light source and add shadows to the forehead, the nose, the lips, and underneath the jaw.



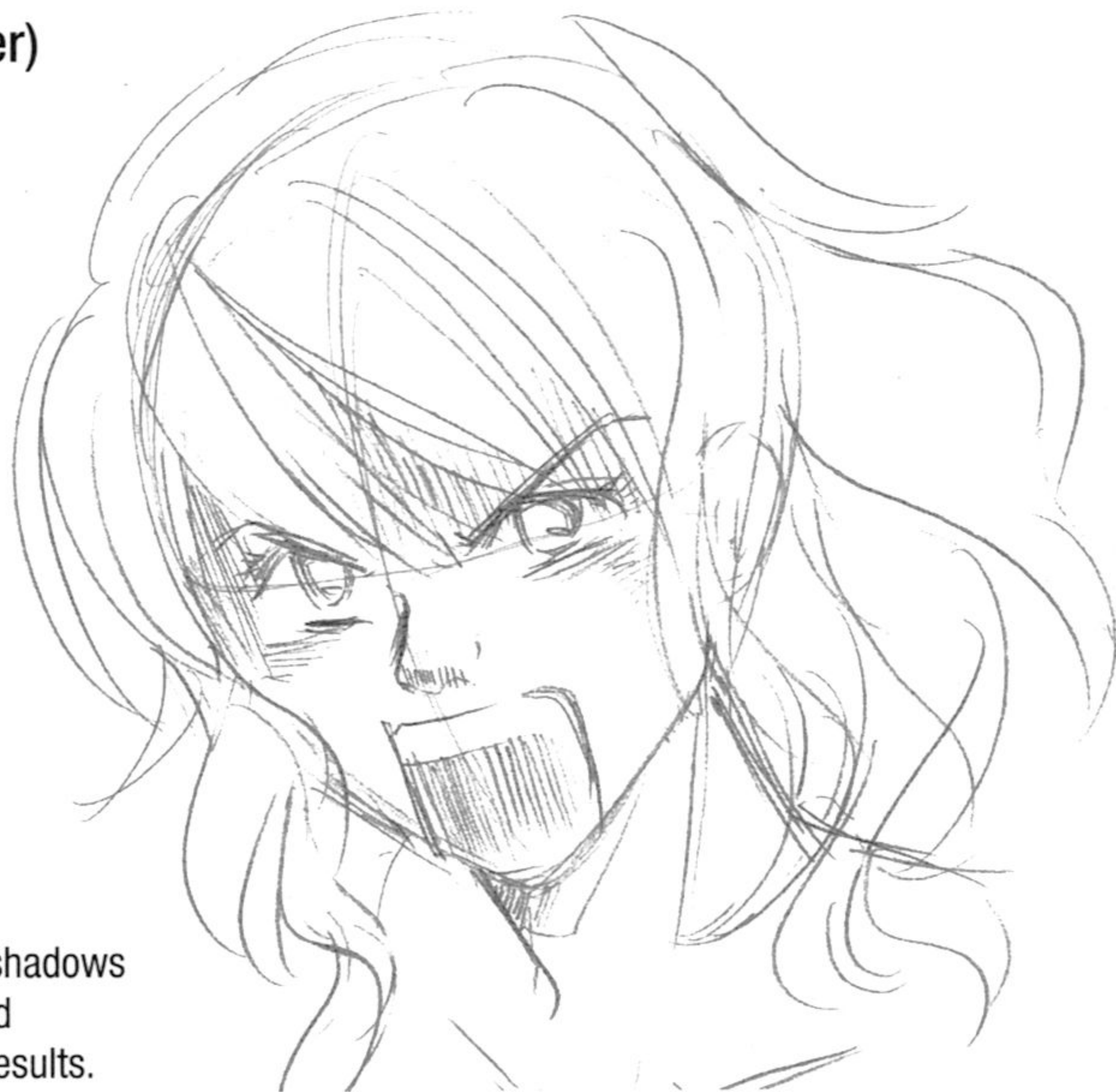
In the case of a character with *chibi* proportions, add minor shadows underneath the eyes and on the nose.

Shouting (Intensifying the Sense of Anger)



High angle composition

For this emotion, setting the light source somewhere above the head and adding shadows to the forehead, underneath the eyes, and underneath the chin produces effective results.



The above shows vertical lines added from the forehead to the sides of the eyes. The shadows added to the corners of the eyes are also effective.

Glancing Back Anxiously (Intensifying the Sense of Apprehension)



Level angle of composition



The above shows shadows added only to the forehead and underneath the jaw (to the neck).

For the example seen to the left, shading was added to the forehead and the side of the face.



Shading solely the forehead sufficiently heightens the sense of worry.

Emotion and Movement Expressed in the Rough Sketch

Portrayal of Emotion and Movement as Seen in the Cover Illustration

Portrayal of emotion and movement begins at the rough sketch stage. The cover illustration of this book constitutes a prime example of emotion and movement being established at the rough sketch stage.

The roof-shaped eyebrows give the character a gentle expression.

The corners of the mouth rise to form a "U". The intension was to avoid an overly exaggerated smile.

The *chibi* (super-deformed) proportions results in a stylistically de-emphasized neck.

The posture and positions of the legs are the same as those used to portray a character running or jumping and are used to make the character's actions endearing.

The lightly clenched fist gives the character a pretty, girlish air while portraying a sense of fluster. It also gives the composition a sense of dynamism, distinguishing it from a still image.

Maintaining a distance between the eye and the eyebrow is one condition required to generate a surprised expression. The simple curve of the downward sloping eyes creates the impression of innocent surprise.

The wide-open eyes evoke the feeling of surprise, while showing the eyes slightly crossed gives the expression an adorable air.

The mouth forms an "O"—a technique for portraying surprise.

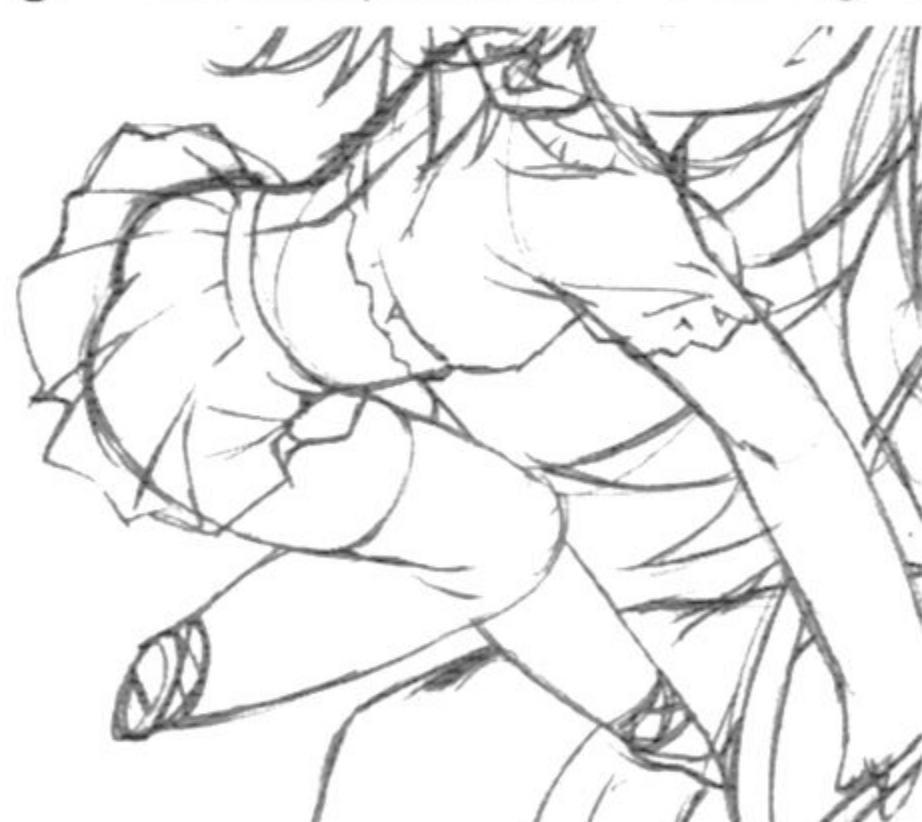
The neck is stylistically rendered to suit a character designed with attractive proportioning.

Completed Line Drawing

The completed line drawing reflects the facial emotion and movement portrayed in the rough sketch.



The smile was fine-tuned to make it appear more reserved by opting for a mouth smaller than that in the rough sketch. However, the smile still displays the subtlety of the original.



Movement in the skirt imparts a sense of dynamism.



Hatching on the cheeks creates the illusion of blushing.

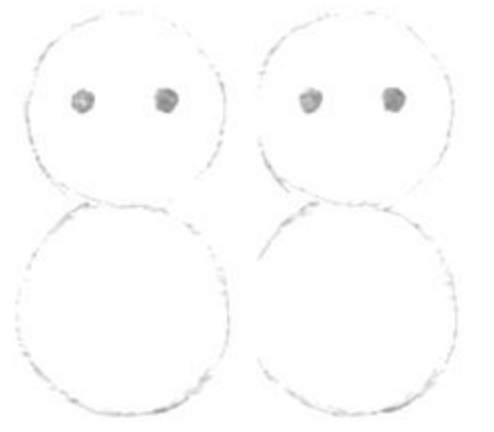


Under drawing

The primary impetus in creating the rough sketch was to condense emotions and moods to their essence to achieve ambiguity. However, if the composition had been left as is, this would have been weakened as the contours were adjusted for the under drawing. Consequently, when cleaning up the lines for the under drawing, hatching was added to the main character's cheeks to create the illusion of

blushing, thereby heightening the emotion portrayed as well as accentuating her girlish appearance.

The process of producing a final under drawing does not consist of merely tracing the lines of the rough or original sketch. The process extends beyond simply reviving what was created in the original sketch. Rather, it is a process that gives birth to something new.



Character Design and Color Design



Head-to-body ratio sketching is applied to a wide range of character designs. Acquiring the skills necessary to distinguish differences in height, build, and proportioning allows you, the artist, to design a cast of characters and profiles that match the target audience or contents of the individual work. This chapter teaches how design characters and how to use the head-to-body ratio sketch so that it will reflect the character design looking at creating character designs for a family to demonstrate the process.

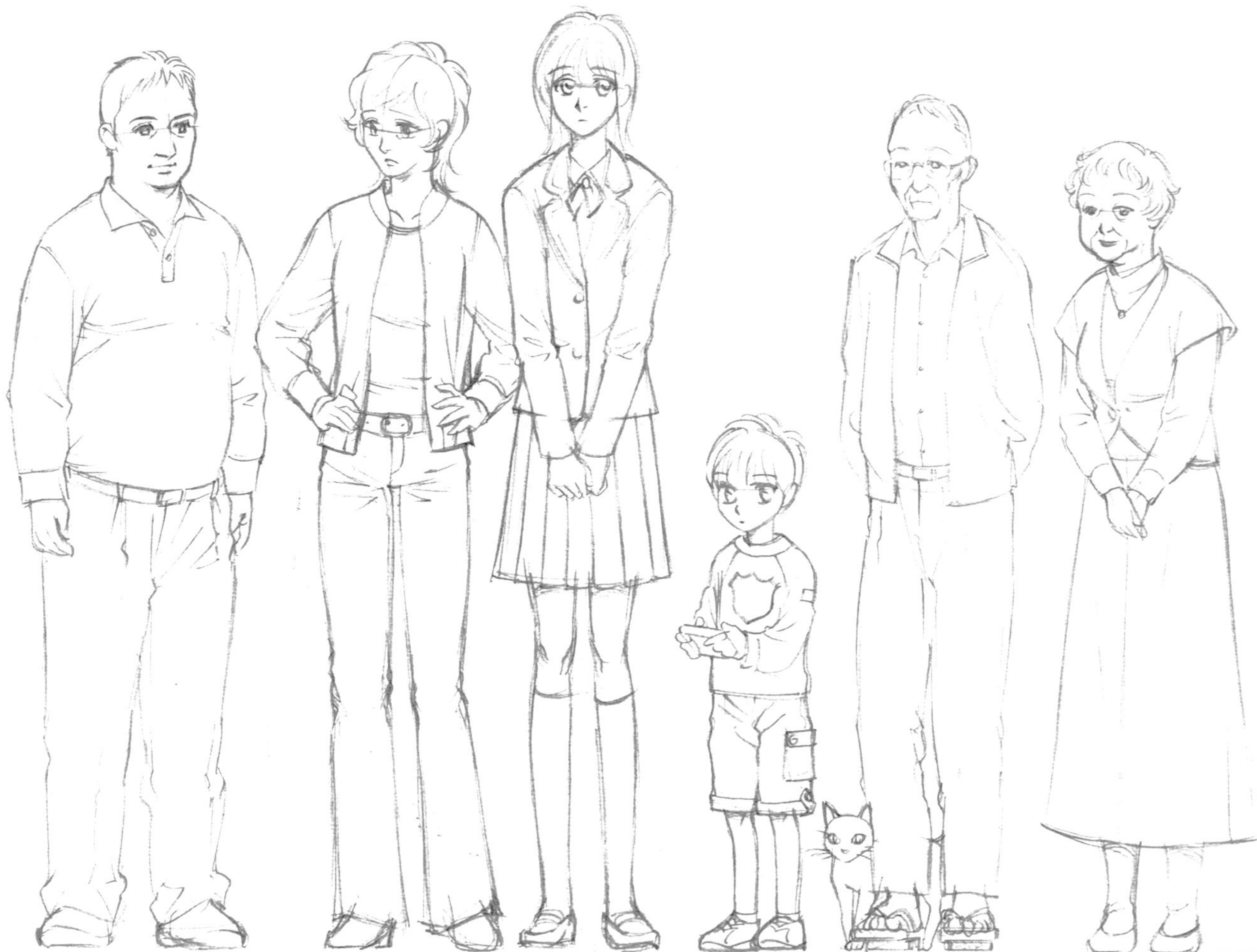
Furthermore, character design is used frequently to produce illustrations or cutouts (single frames) as well as *manga* and *anime*. Since character design is also commonly used particularly in illustration as a means of coloring in applying the finishing touches, this chapter presents the practical application of coloring, founded on character design.

Character Design as Role Assignment

The head-to-body ratio is a technique that allows the artist to perfect the proportioning and build of his or her characters. Use the head-to-body ratio to give each character a sense of individuality.

Designing a Family

A family of characters is a compilation of character sketching employing various head-to-body ratios. Determine what image the character should project before drawing.



Father: He plays golf and had a muscular build when younger—a run-of-the-mill character, who is fairly mediocre at his job, hobbies, and as a father.

Mother: She is youthful for her age. Concerned about her body's appearance, she tends to favor figure-concealing clothing as a result.

Daughter: Her school performance is fairly average, and she does not excel in anything in particular. The only thing exceptional about her is her height. She is secretly envious of her vivacious mother and grandmother.

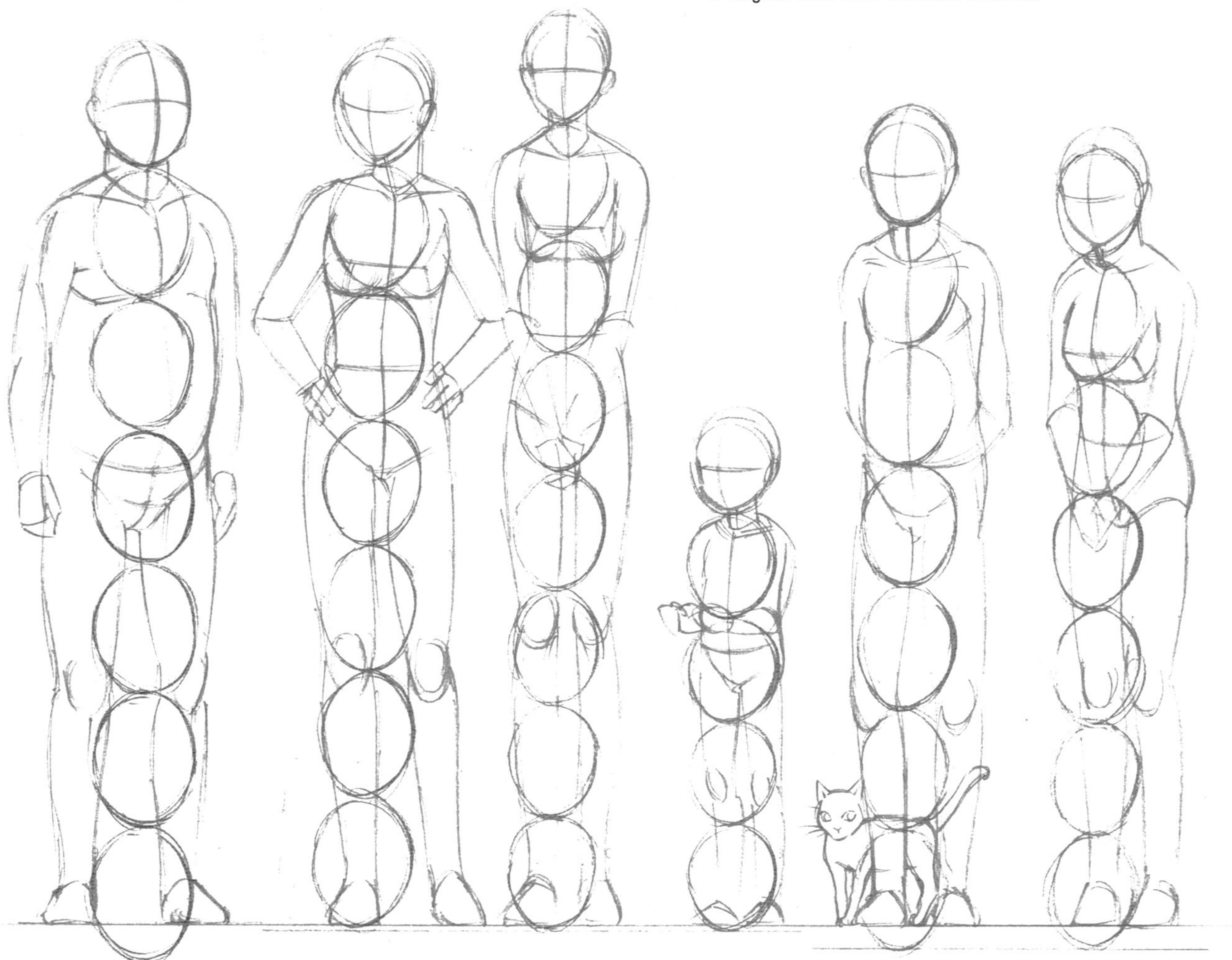
Son: He is an aloof, collected child who does not overtly display his emotions. However, he does have a strong sense of justice. He excels at both school and sports.

Grandfather: He is quiet, and when he speaks, his wife and daughter frequently interrupt him. He likes cats and collects antique weapons. He has a black cat.

Grandmother: She is gentle and ladylike but tends to be talkative. She has many friends and hobbies and particularly likes gardening.

Distinguishing Height Differences

The character's profile determines his or her height. Characters drawn at the same head-to-body ratio may project differences in height if their head sizes are different.



Father: (1:6.5) He is average but slightly portly. Give overweight characters a slightly shorter head-to-body ratio.

Mother: (1:7) The mother is a cheerful character. This ratio helps to project a slim and active impression.

Daughter: (1:8) A tall character, the daughter has been given a moderately small head. Care was taken to ensure she did not appear ridiculously taller than her mother and father.

Son: (1:5) To project a composed and intelligent impression, this ratio gives the son a smallish face and long legs.

Grandfather: (1:7) As the mother's father, he has been given the same head-to-body ratio as she. A moderately shorter height makes the character appear more convincingly elderly, so his face was drawn on the small side.

Grandmother: (1:7) She was given this ratio and a smallish face to create the look of an energetic elderly woman.

Family Tree of Faces



The daughter's eyebrows and eyes are similar to the father's. She inherited the downward slope of her eyes from both her mother and father.

Father

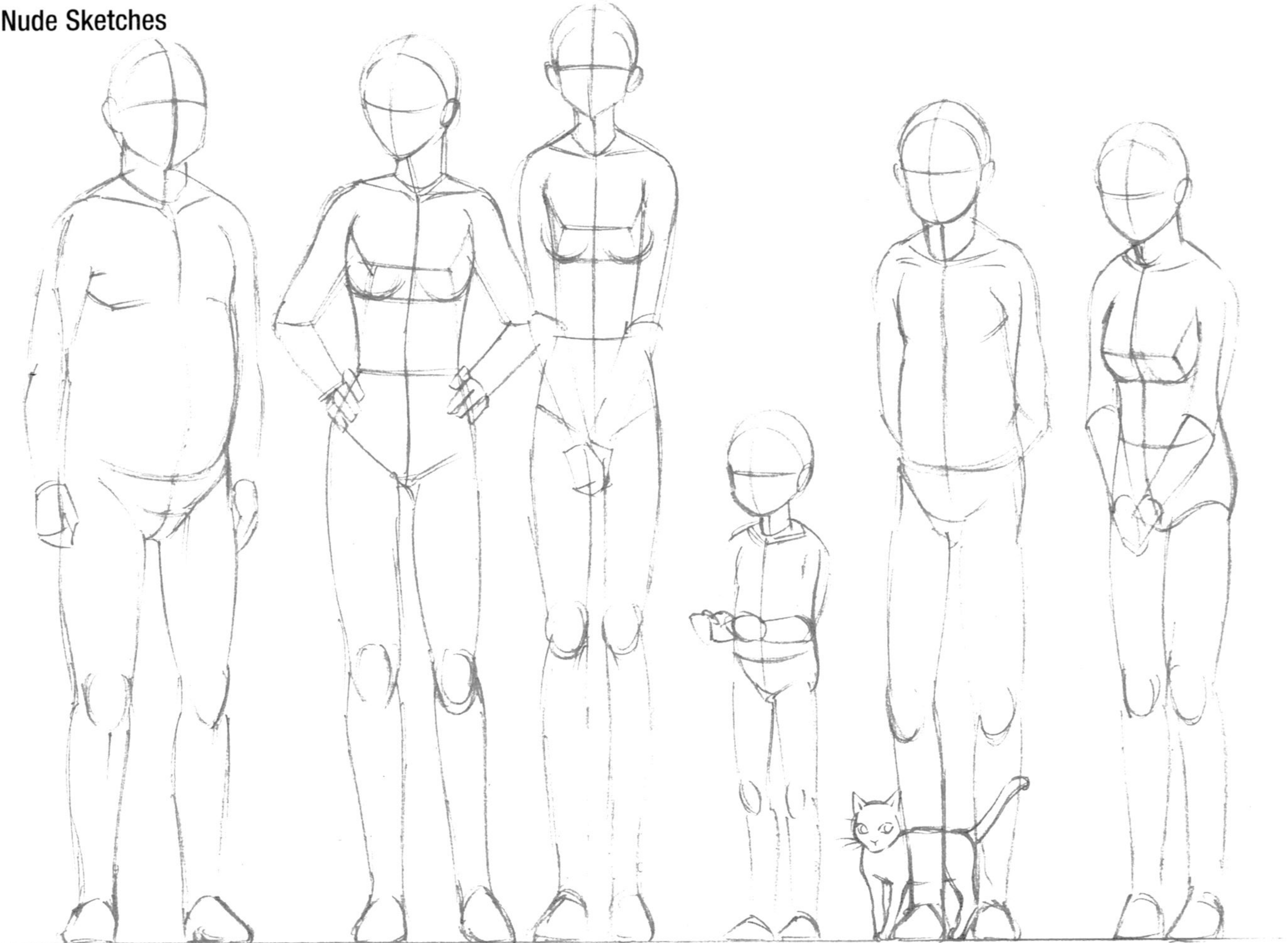
The son's nose and eyebrows are similar to the mother's.

The mother inherited her hair from the grandmother.

Grandfather: Father of the mother

Grandmother: Mother of the mother and the source of the downward sloping eyes present on the mother and granddaughter.

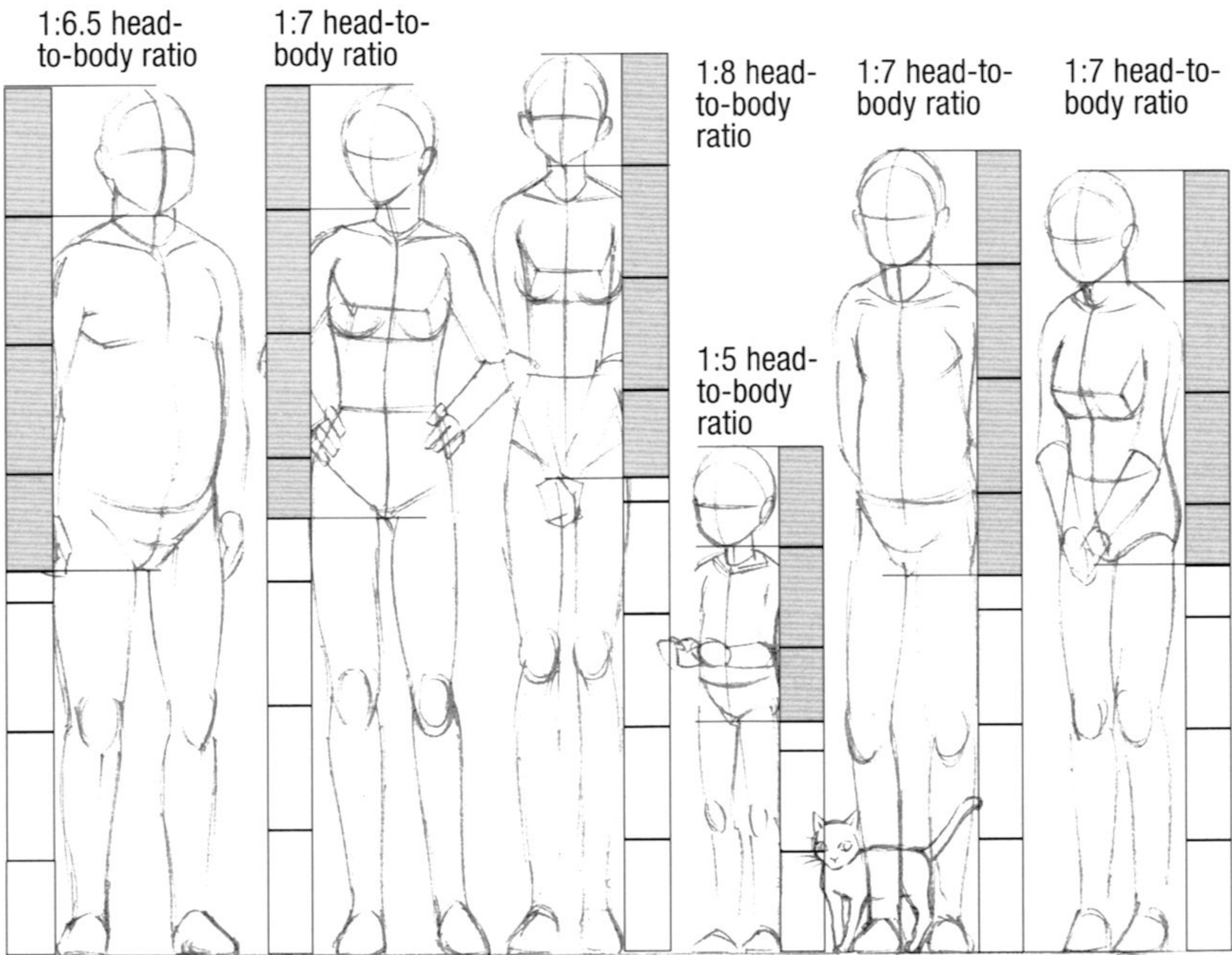
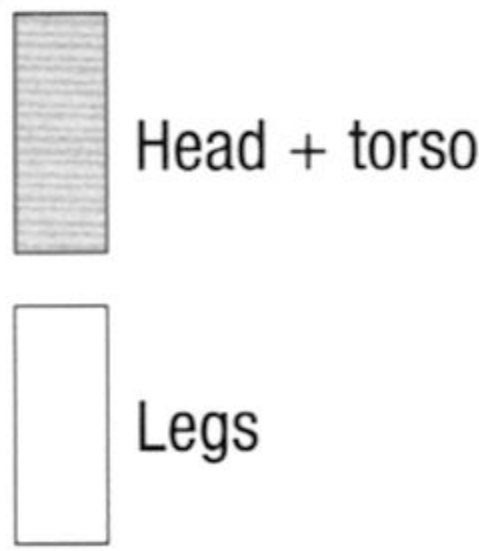
Nude Sketches



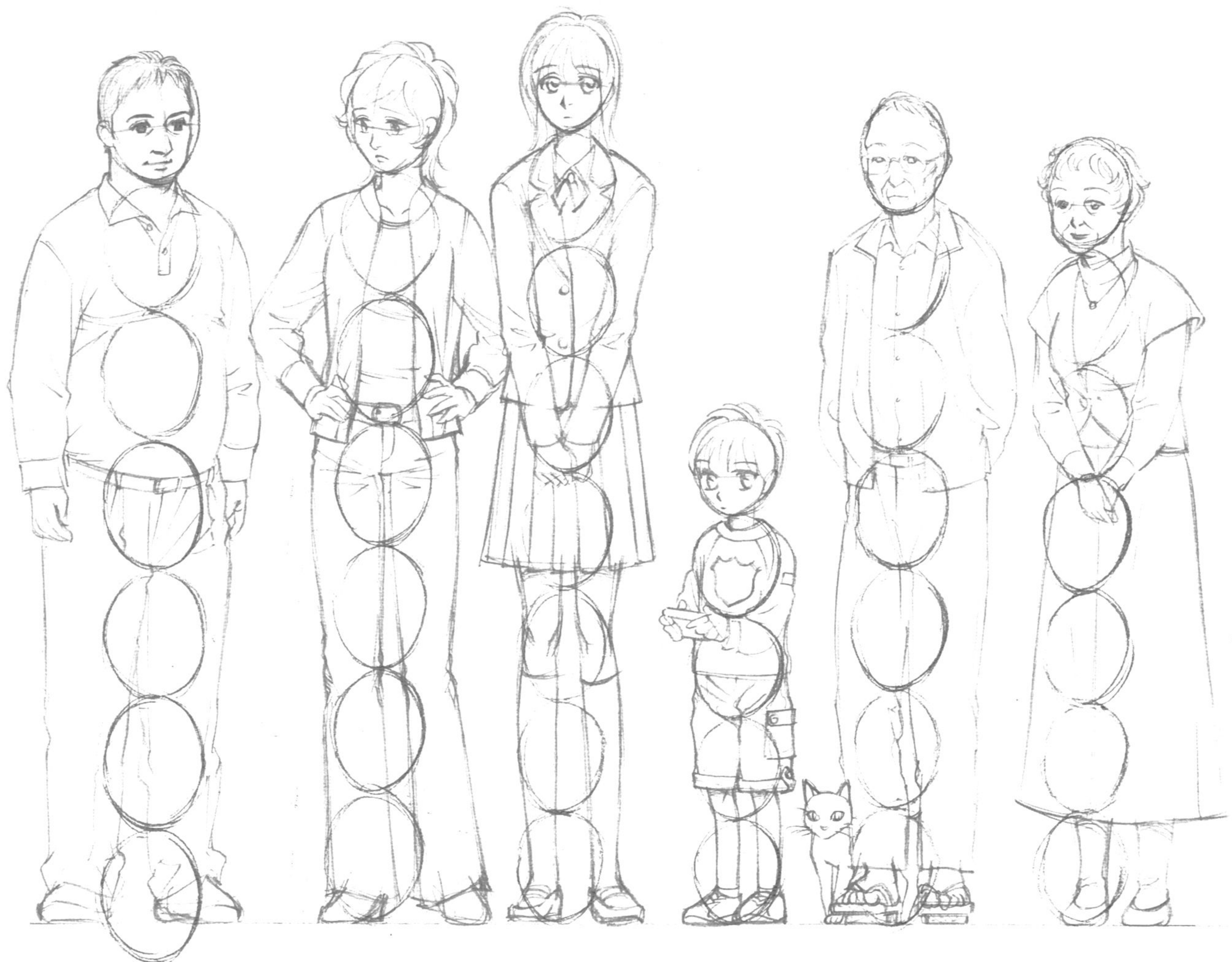
The nude sketches of the family seen above include the cat, hidden behind the grandfather's legs in the final image.

Double-checking Builds and Proportioning

Sketching the figure consists of determining the head's size, determining the overall height, determining the groin's position and then fleshing out the figure, so really there is little room for error. However, when designing a large number of characters, it is a good idea to double-check the proportioning to ensure that the builds match the image intended for the character as decided in the individual character designs.

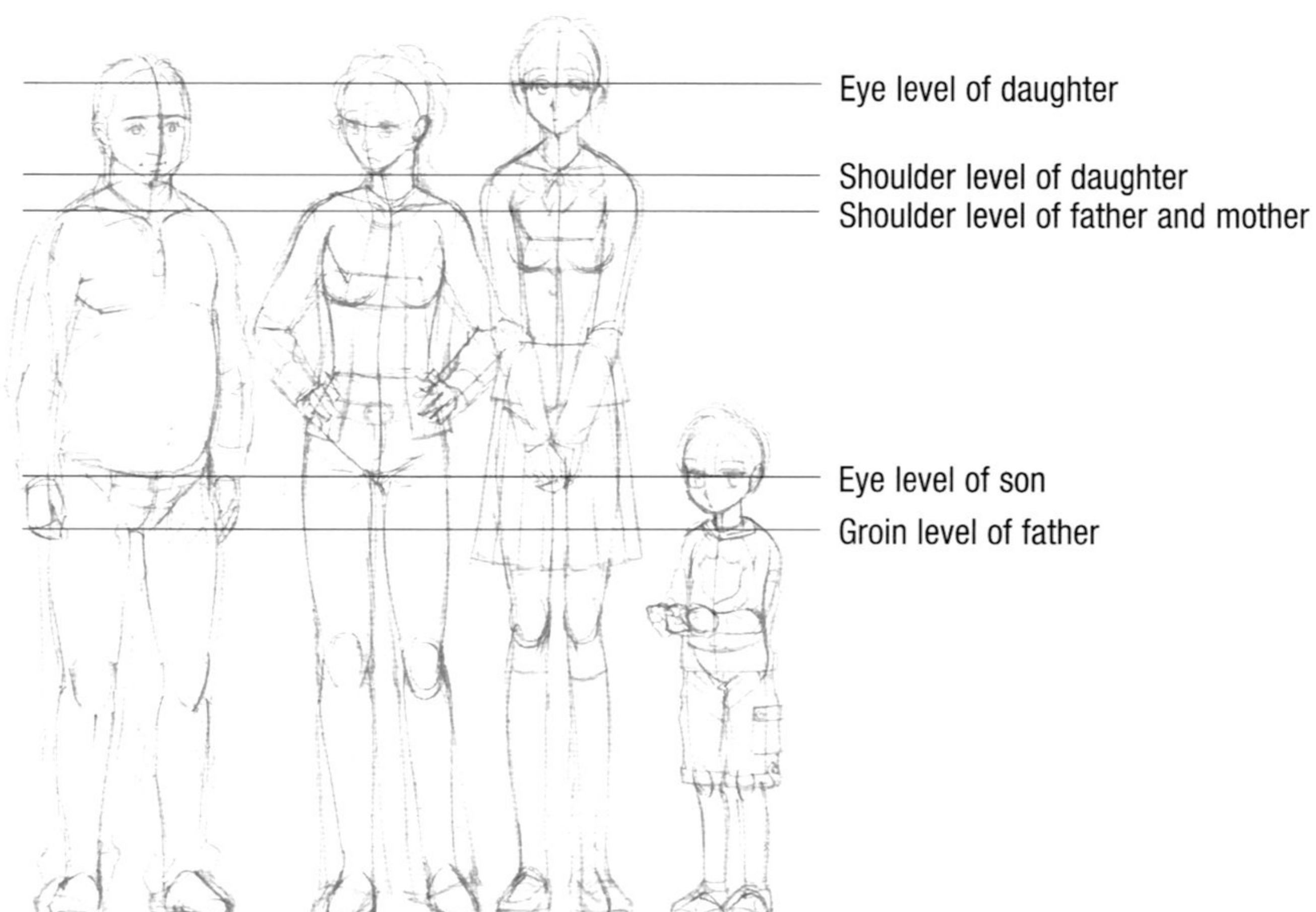


| | | | | | |
|---|---|---|--|--|--|
| Father (longish torso): Torso = 55% Legs = 45% | Mother (ideal build): Torso = 50% Legs = 50% | Daughter (long-legged): Torso = 45% Legs = 55% | Son (longish torso): Torso = 55% Legs = 45% | Grandfather (longish torso): Torso = 55% Legs = 45% | Grandmother (ideal build): Torso = 50% Legs = 50% |
|---|---|---|--|--|--|



Double-checking Eye and Shoulder Levels

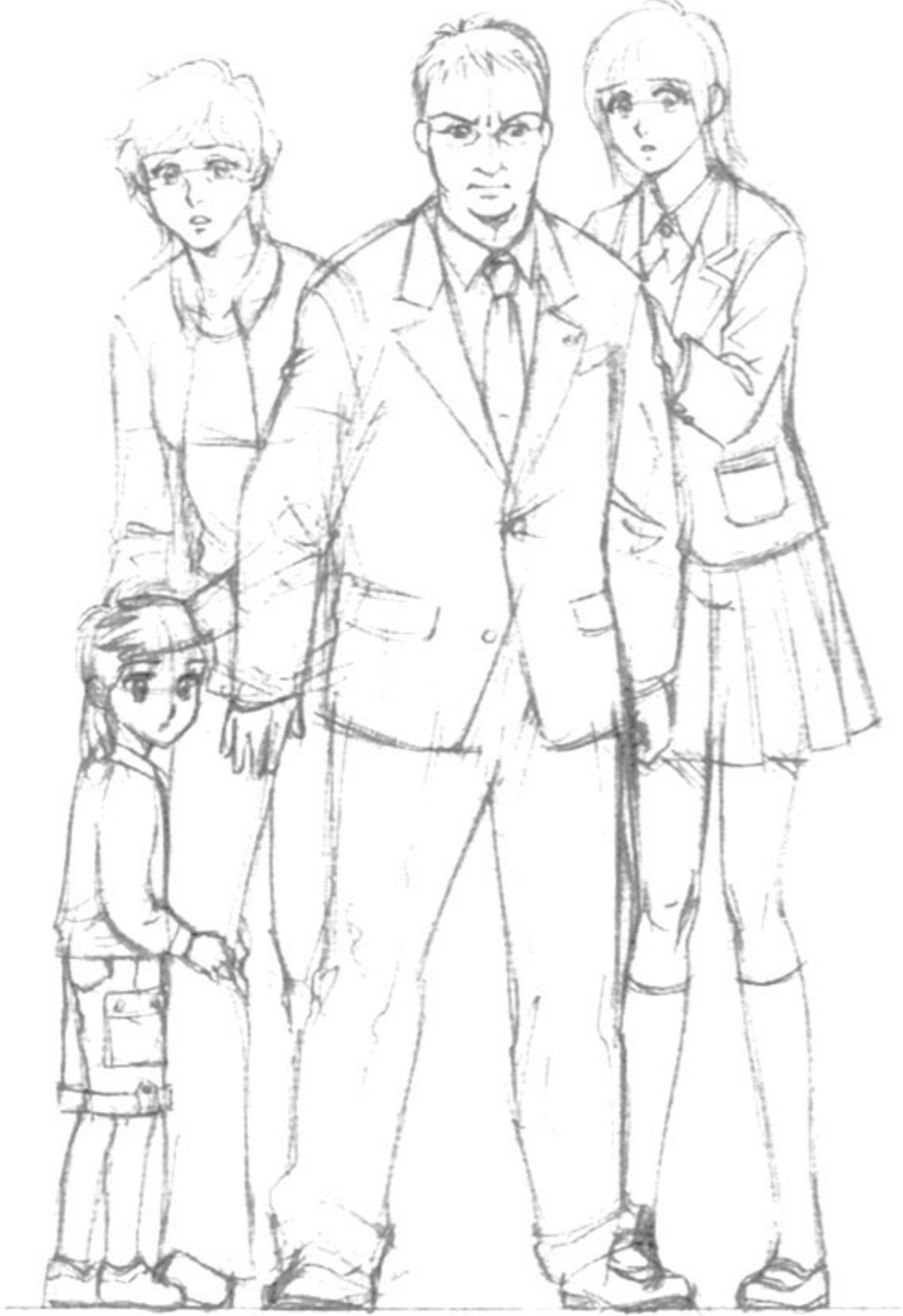
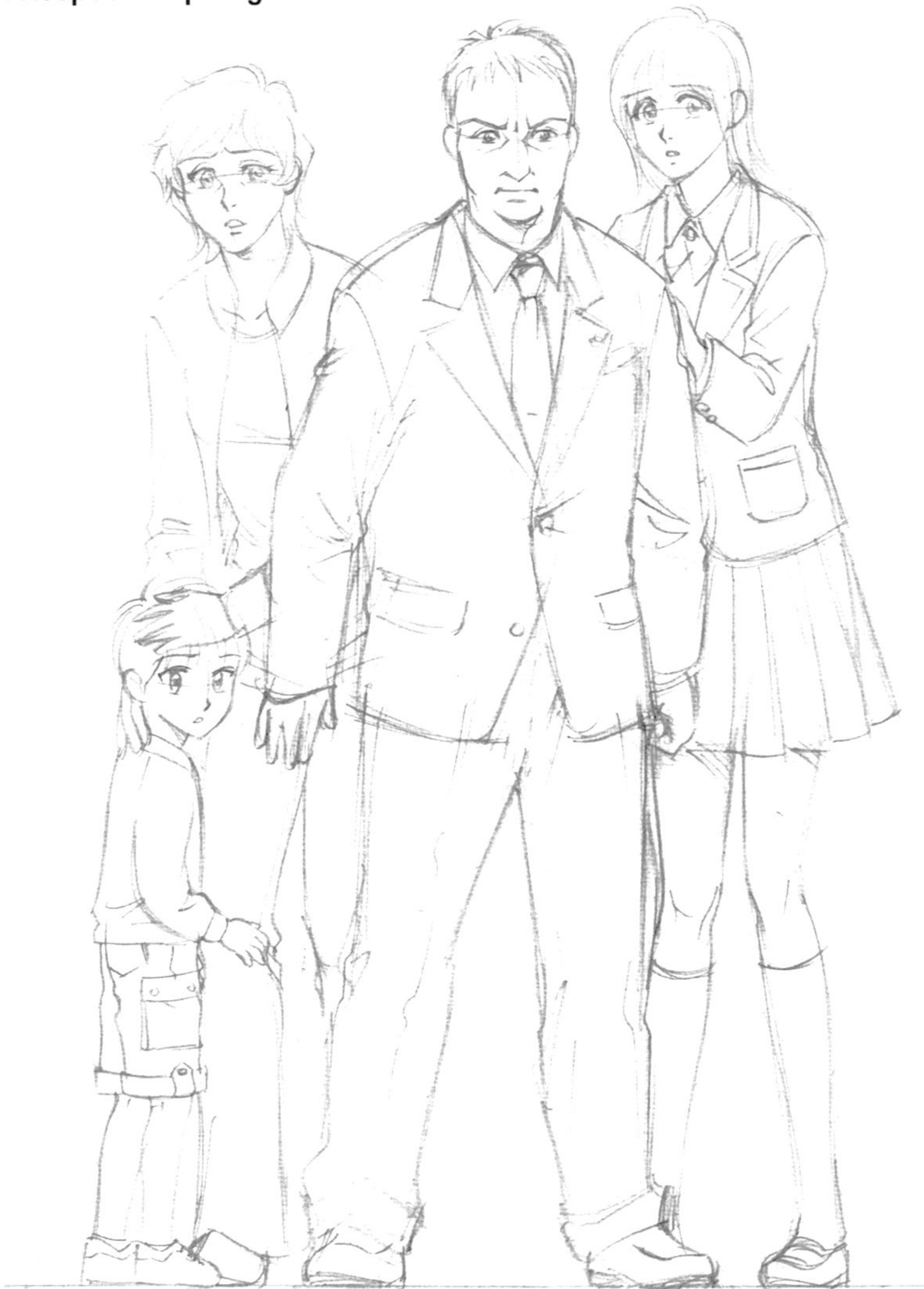
The eye levels of the main characters, and of the protagonist in particular, are vital. In dialogue scenes, whether a particular character gazes up or down when talking helps the artist convey to the reader whose lines are being delivered.



Role Assignment and Character Design

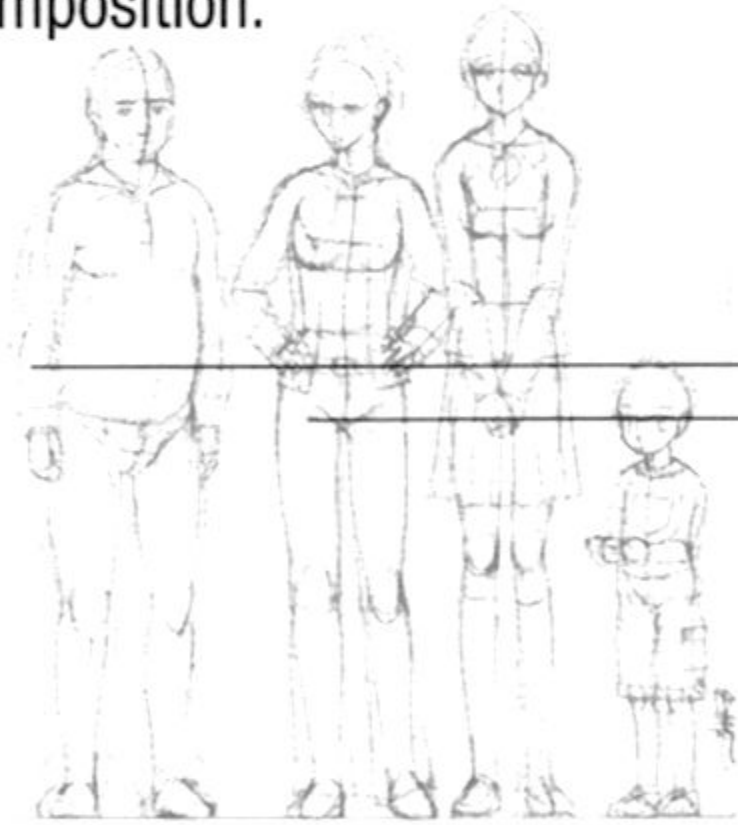
A Respect-inspiring Dad

Maintain flexibility when devising your character designs, matching the design to the setting, the personality profile, and the role.



Setting: A blue-collar father battles a crooked land shark. In this situation, strategic positioning of the characters makes the father appear strong and respect-inspiring. The protagonist is positioned in the center of the composition. His posture is straight, and he wears a courageous expression on his face.

Make use of the character designs in drawing the composition.

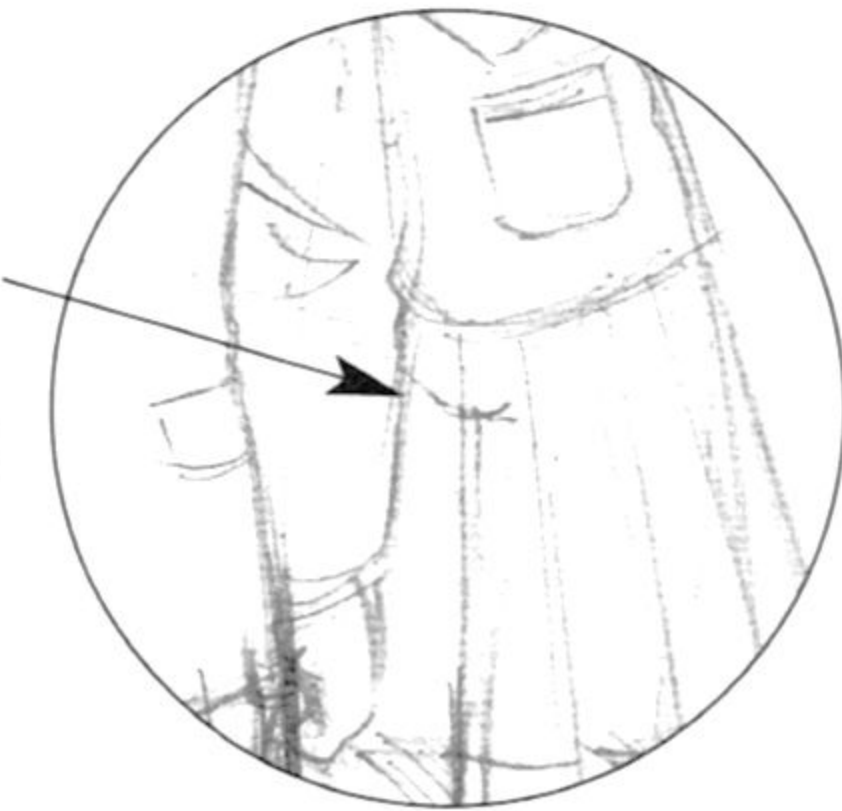


When positioning the daughter next to the father, verify where her groin level should be located in relation to his to reflect that she is taller.

Confirm the position of the mother's face as she clings to the son.



We bend at the hips when leaning forward, so the level of the groin remains in the same position as when standing up straight. Positioning the daughter's groin level at exactly the same height as in her character design sufficiently establishes the difference between her height and her father's.



Half of the mother's body is hidden behind the father, so it was necessary to draw a full figure layout for the mother on the back of the drawing to capture the proper figure proportioning.

The peripheral characters are positioned around and close to the protagonist to make him appear impressive.

Changes in Facial Expressions

The key points in altering facial expressions lie in the irises and pupils, the eyebrows, and furrows and wrinkles.



The typical father: Note the large irises and the gentle eyebrows.



Father in a time of peril: Make the irises smaller and show the eyebrows rising. Accentuate the corners of the mouth and emphasize the furrow in the brow and the wrinkles at the corners of the eyes. Darken the shadows on his neck.



Showing the father shouting or displaying a similar angry reaction with the mouth open is an effective portrayal capable of changing the impression the character projects.

Drawing Facial Expressions That Reflect the Character's Personality and Design



Daughter: Large, downward sloping eyes



The subtly furrowed brows and clearly delineated irises and pupils create the sense that the daughter has the strength to maintain her gaze on her target, despite feelings of worry.



Mother: Downward sloping eyes



The dramatically knitted eyebrows and almost virtually straight-on angle of perspective elicit a sense of vigor while simultaneously underscoring feelings of trepidation.

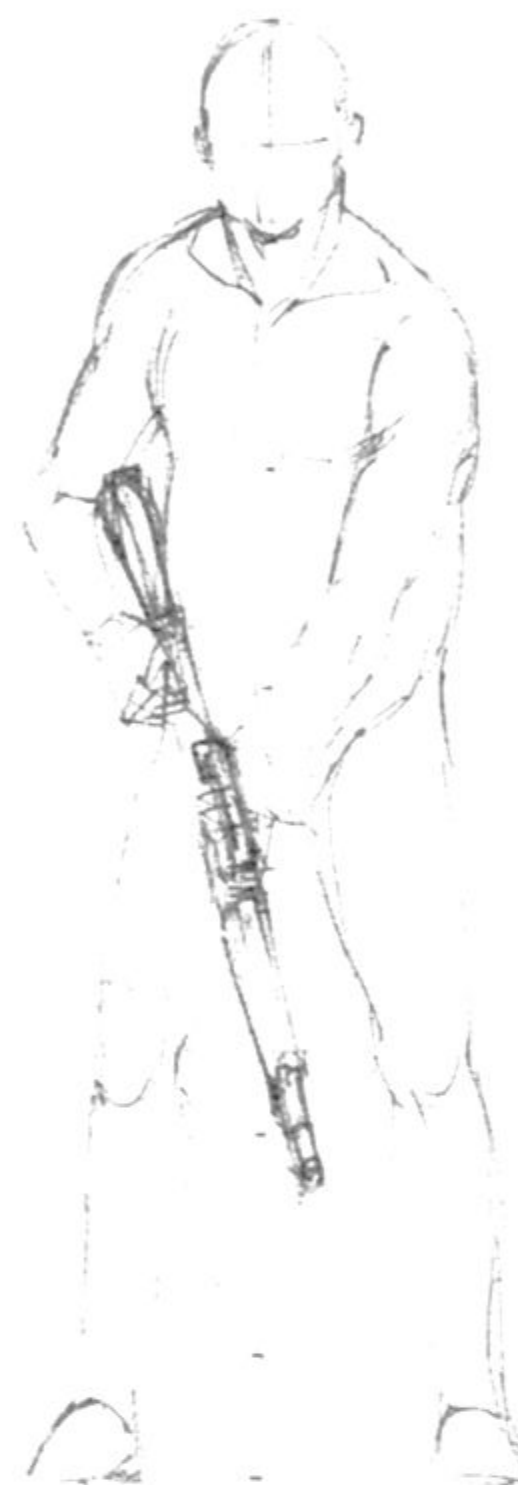


Son: Standard eyes



As the son's original design is that of a cool cucumber, his eyebrows knit only slightly. He averts his gaze, creating the impression of a concerned but aloof character.

Even outrageous changes may be made to the character depending on the setting, which in this case is war or battle action.



Here, muscle has been added to the father's original portly build to turn him into a convincing soldier.



Designing Villains and Bad Guys

Troublemaker A



Troublemaker B



The profile of the villain who threatens the family's tranquil household reinforces the father's image as the family's protector.

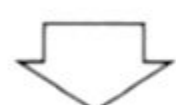
Out-of-the-Ordinary Family

When faced with an emergency, the family bonds together and becomes battle-ready. To portray such circumstances, the artist needs to outfit each family member in a costume and weapon that reflects his or her individuality. Furthermore, having some of the characters transform dramatically while others remain relatively the same allows you, the artist, to expand your character repertoire.



Dramatically Transformed Characters

Regular
Appearance



Battle-
Ready



When in a pinch, the daughter becomes a potent dynamo.

The grandfather becomes a man of action when faced with a crisis.

Relatively Unchanging Characters



The father has a propensity for pressing his luck.



The mother is always to meet a challenge.



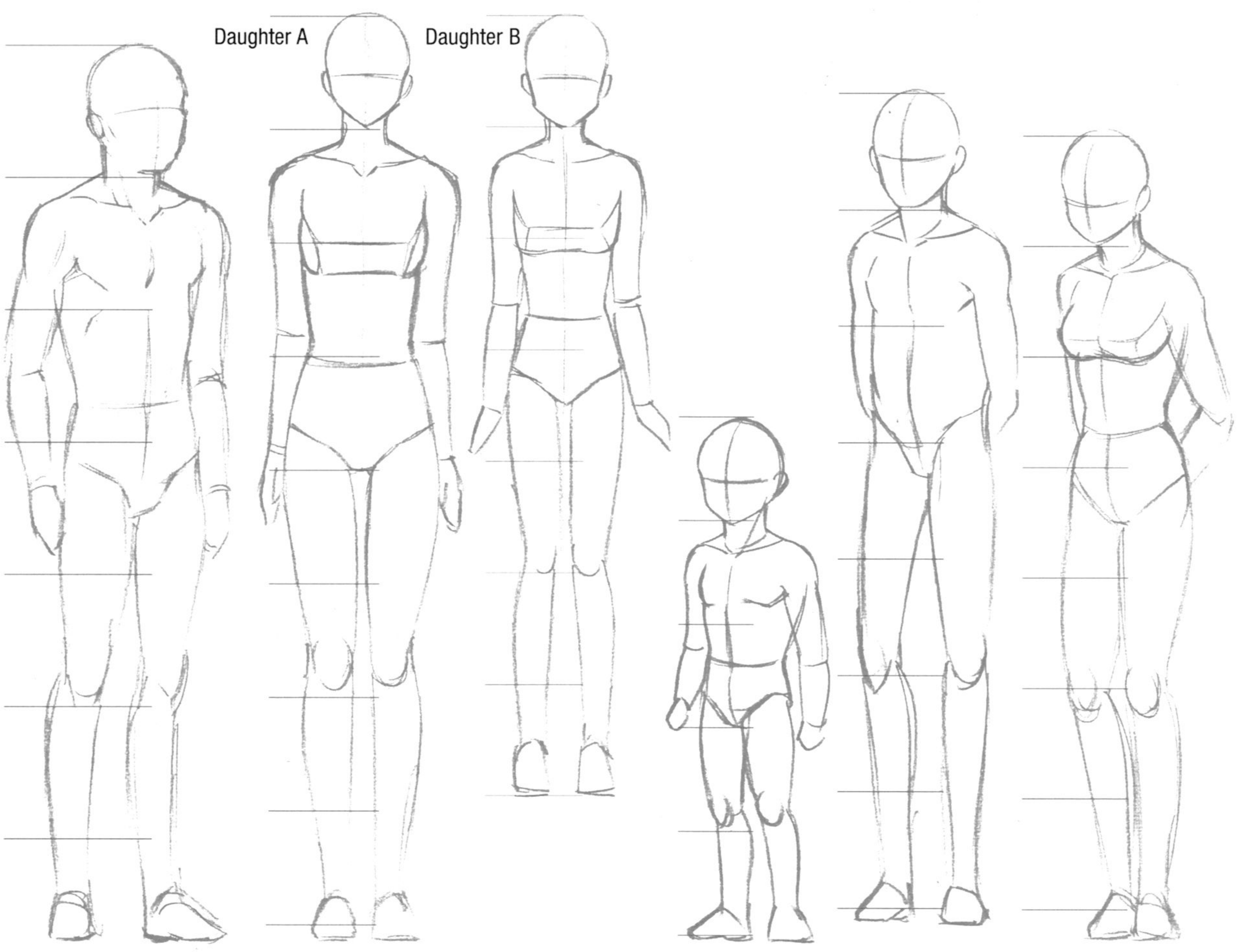
The son is typically a cool cucumber.



The grandmother is likewise calm and collected.

Character Design by Trial and Error

The character designs of the individual family members may require modification depending on how the plot develops.



The father's head-to-body ratio remains the same at 1:6.5. However, his build has been slimmed down. His distinguishing feature is now a large head.

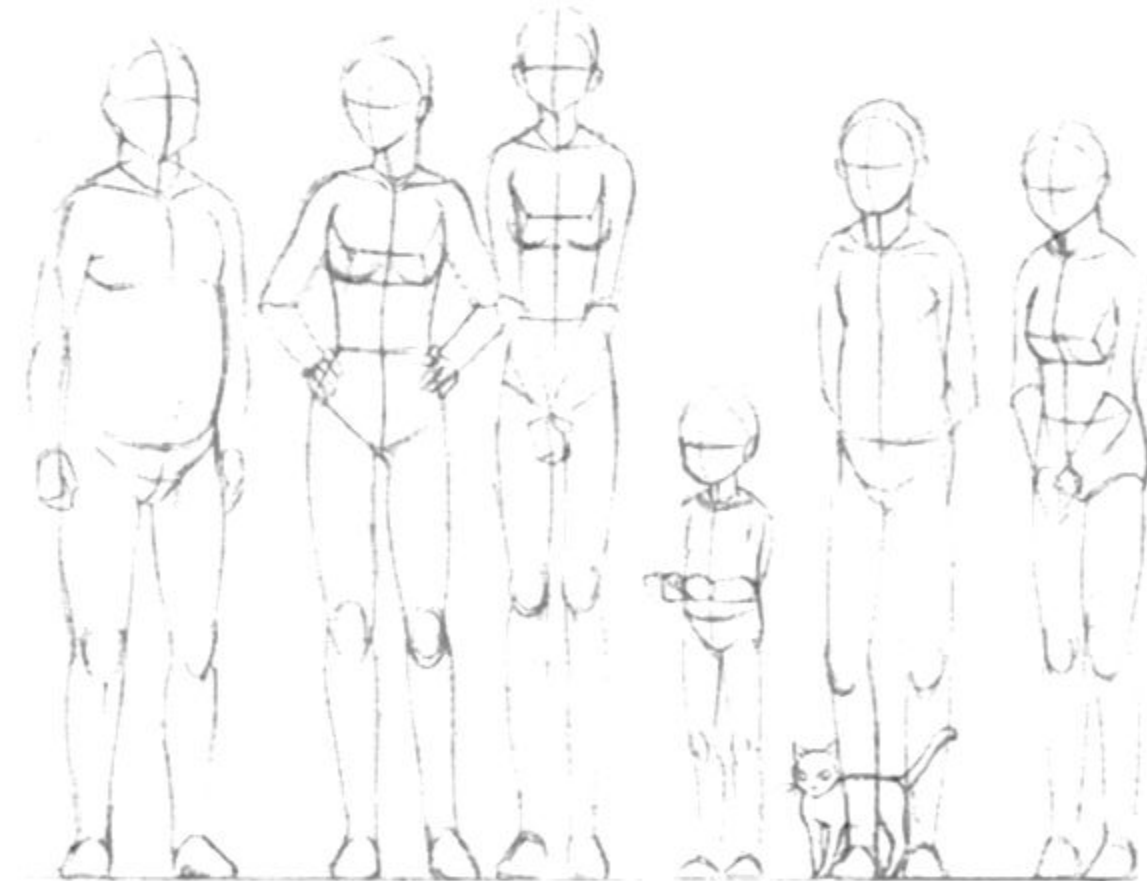
Daughter A: This design consists of giving the daughter broader shoulders resulting in a brawnier appearance. The head-to-body ratio remains 1:8.

Daughter B: In this design, the daughter still retains the same shoulder width, but her shoulders are now squared instead of rounded. She is now short in stature, drawn at a ratio of 1:7. The concept is that she transforms into an alternate identity.

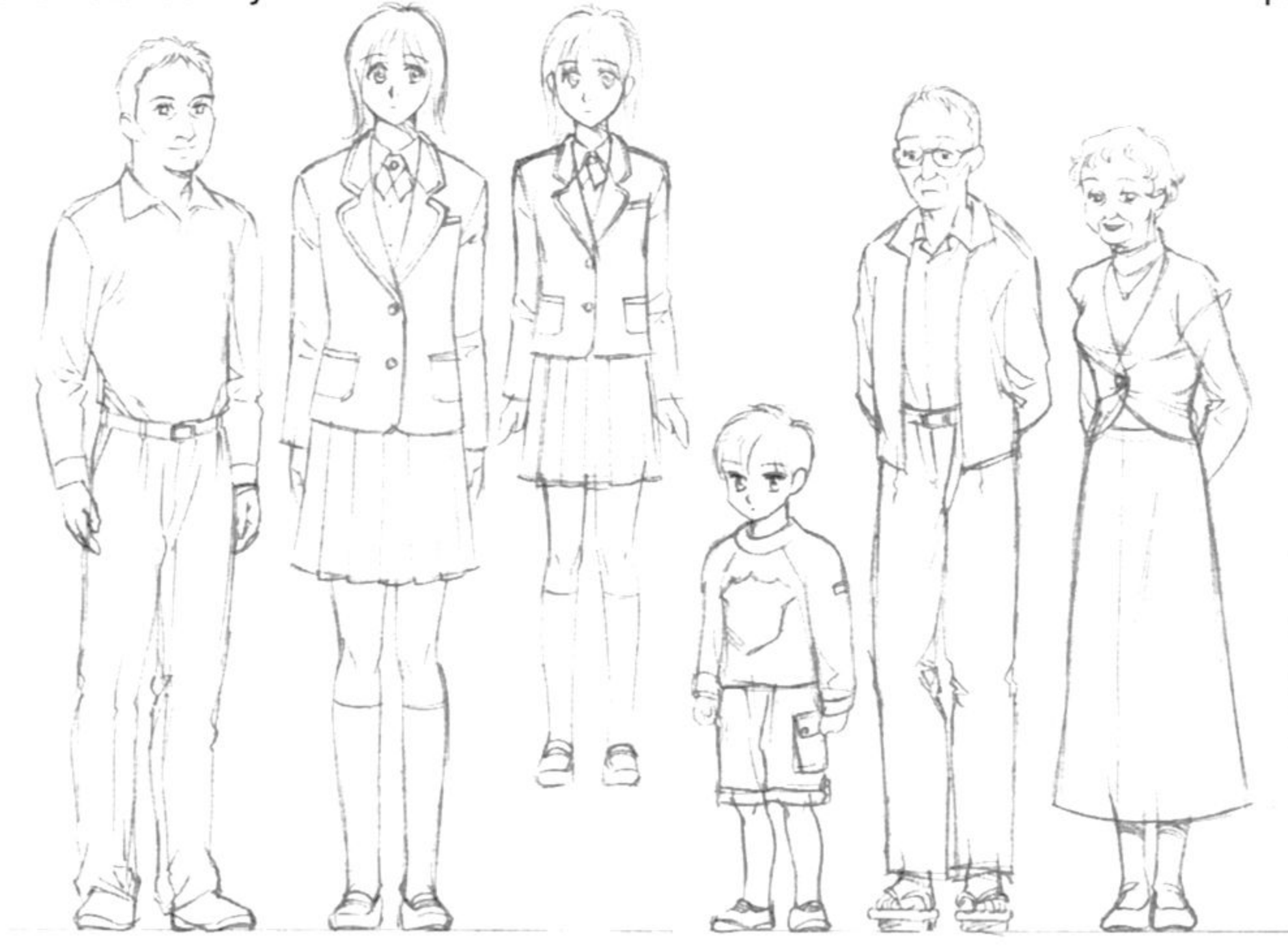
The son has been shifted to a more muscular build at a ratio of 1:5.

The grandfather is now a long-legged 1:7. His character has been tweaked to give the impression that there is more to this grandfather than meets the eye.

The grandmother retains her 1:7 head-to-body ratio but has been given an inhumanly fit build. This gives her an otherworldly mystique, which becomes foreshadowing for future plot development.



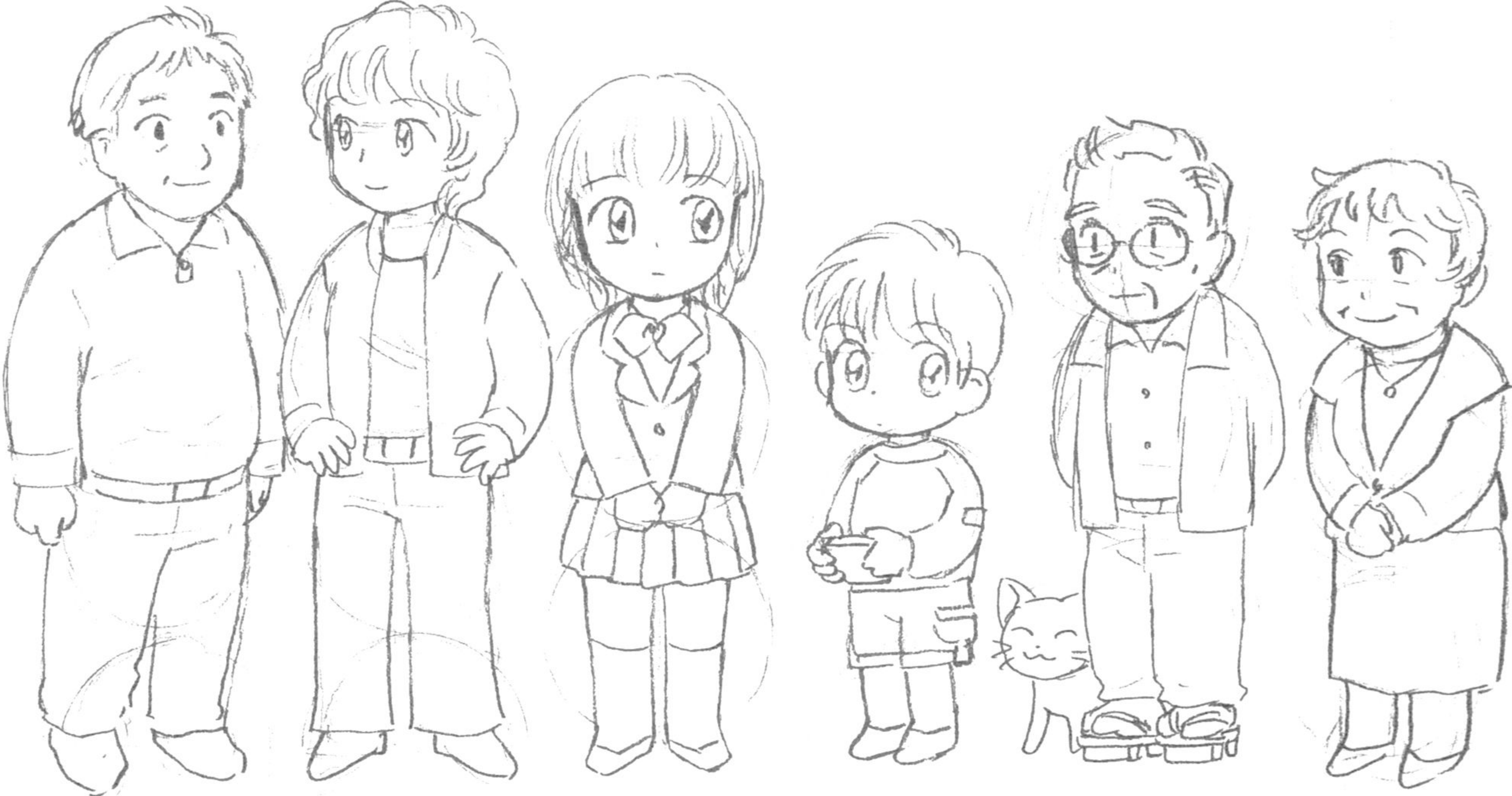
Original figures



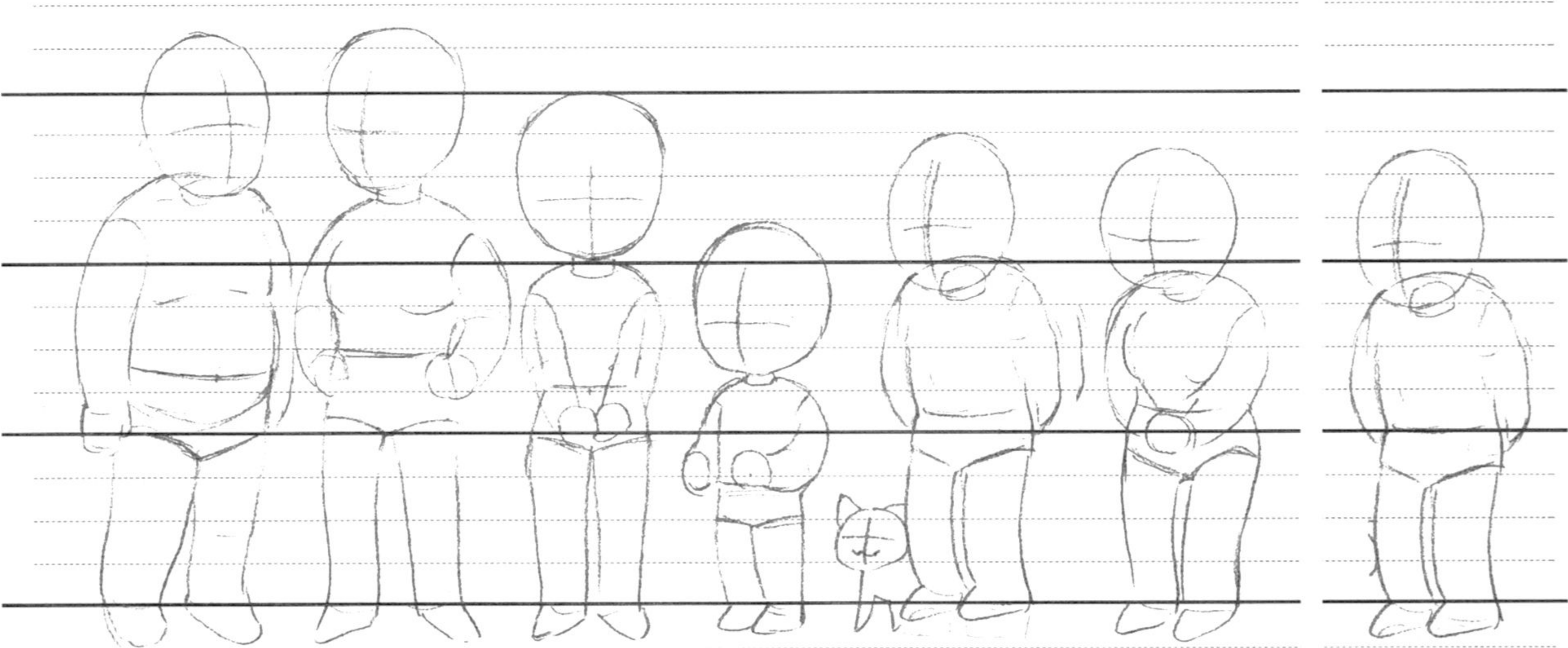
The mother has been dropped from the story, so she has not been redesigned.

Redesigning the Characters with *Chibi*-proportioning

Establish differences in the characters' heights using ratios between 1:3 and 1:4. Half (0.5) and quarter (0.25) head-lengths yield large visual differences in height.



Father: 1:3.5 head-to-body ratio Mother: 1:3.5 head-to-body ratio Daughter: 1:3 head-to-body ratio Son: 1:2 head-to-body ratio Grandfather: 1:3 head-to-body ratio Grandmother: 1:3 head-to-body ratio



The father and mother are a quarter head-length taller than the daughter.

The daughter as the protagonist is drawn at 1:3. The son is three-quarters of a head-length (approximately one head) shorter than the daughter.

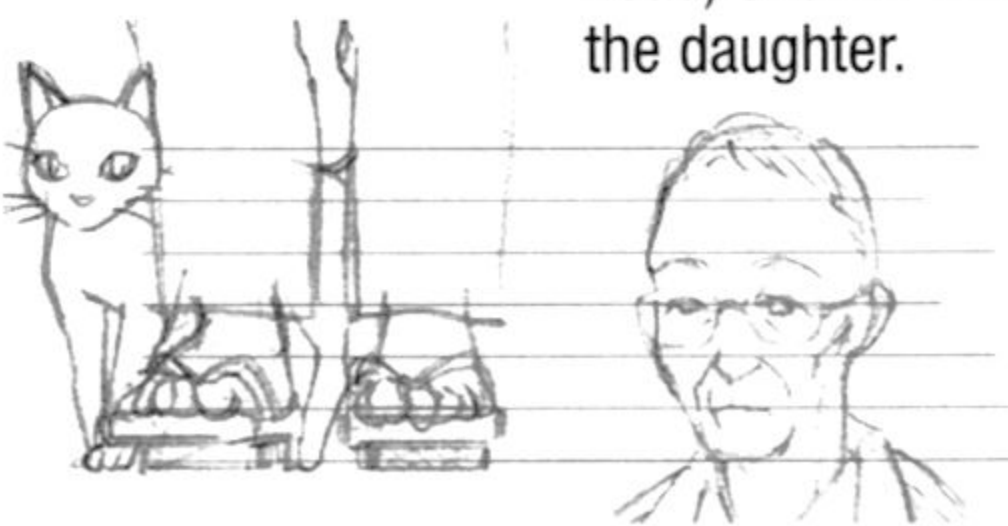
The grandfather is a half head-length shorter, but the *geta* (platform sandals) add another quarter head-length to his height.

The grandmother is the same height as the grandfather, but the lack of *geta* gives her the appearance of being shorter.

Ref. Fig.: Grandfather without *geta*



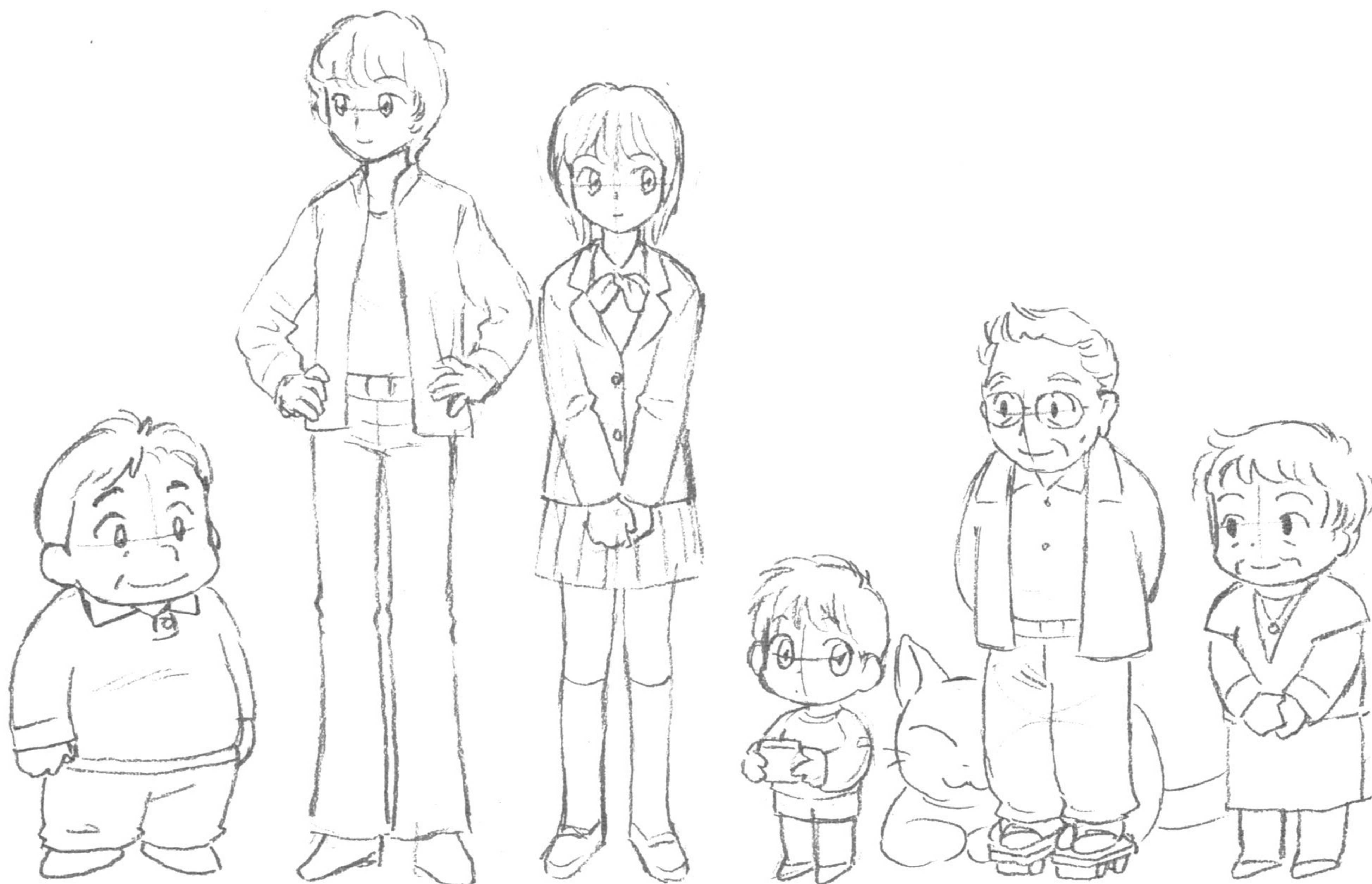
Family Drawn with Attractive Proportions



When drawn to typical, attractive proportions, the grandfather's *geta* adds one-sixth of a head-length (less than 20%) to his height, an amount measuring to approximately half an ear. This makes his head-to-body ratio within the prescribed range.

Manga-esque Character Designs

A commingling of attractive and *chibi*-influenced proportions



Father: 1:2.5 head-to-body ratio

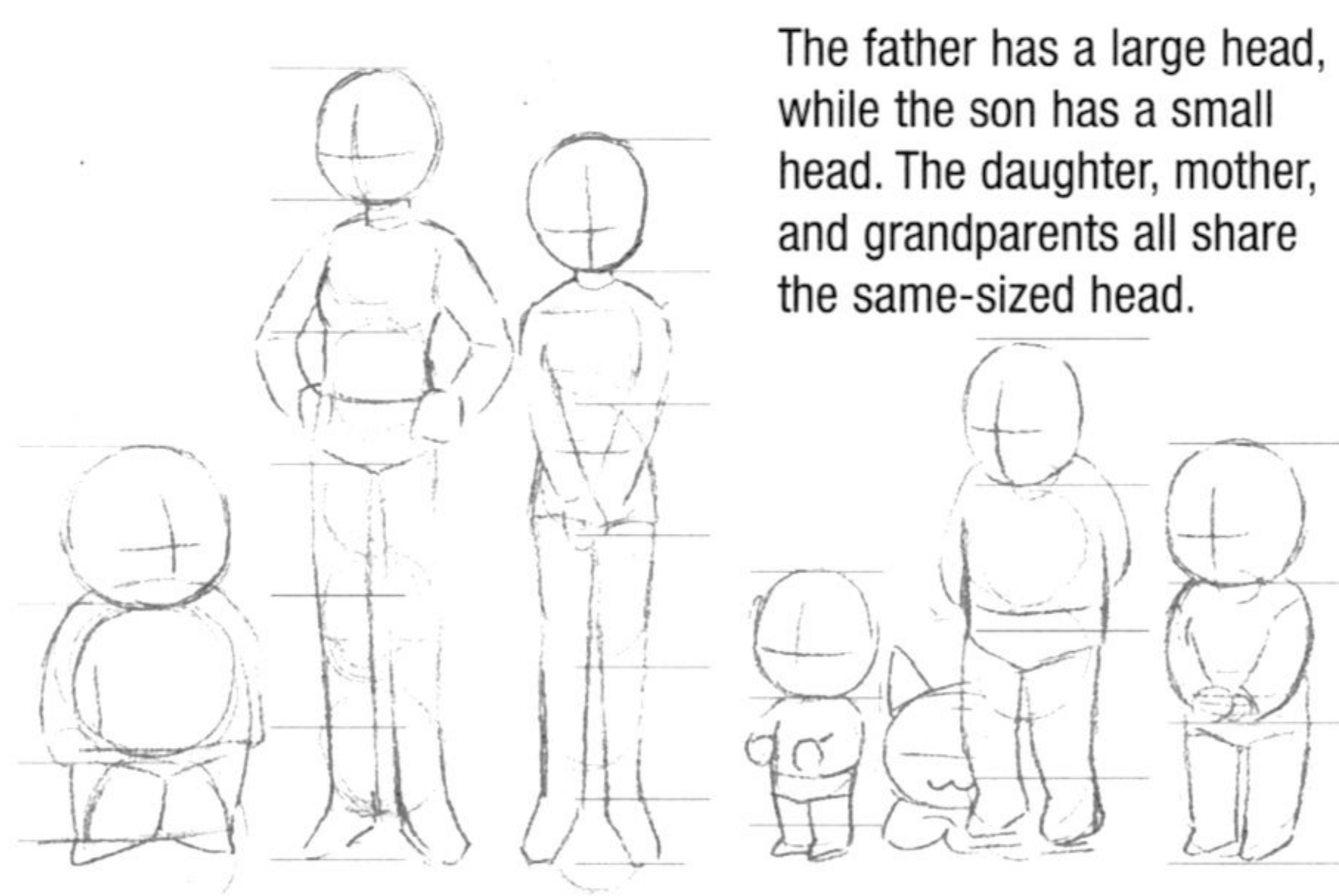
Mother: 1:6 head-to-body ratio

Daughter 1:5.5 head-to-body ratio

Son: 1:2 head-to-body ratio

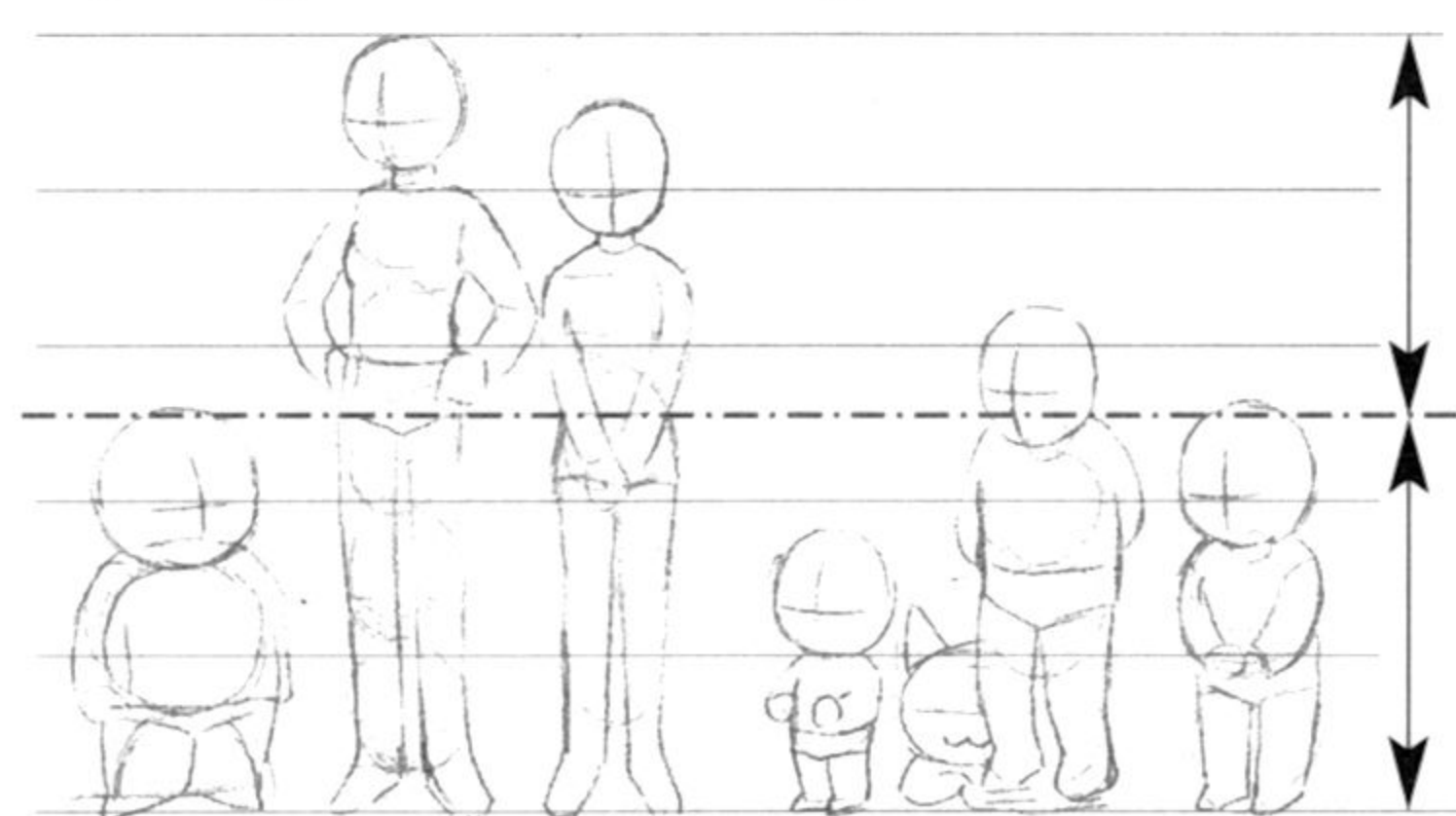
Grandfather: 1:3.5 head-to-body ratio

Grandmother: 1:3 head-to-body ratio



The father has a large head, while the son has a small head. The daughter, mother, and grandparents all share the same-sized head.

Capturing Differences in Height



With the mother as the tallest character, this line denotes half her height.

Simplify differences in the heights of the *manga*'s characters to make them readily apparent to the reader.

Character Stylization the *Manga* Way

Attractive Proportions

Chibi Proportions

Mixture



1:6.5 ratio dad



1:3 ratio dad



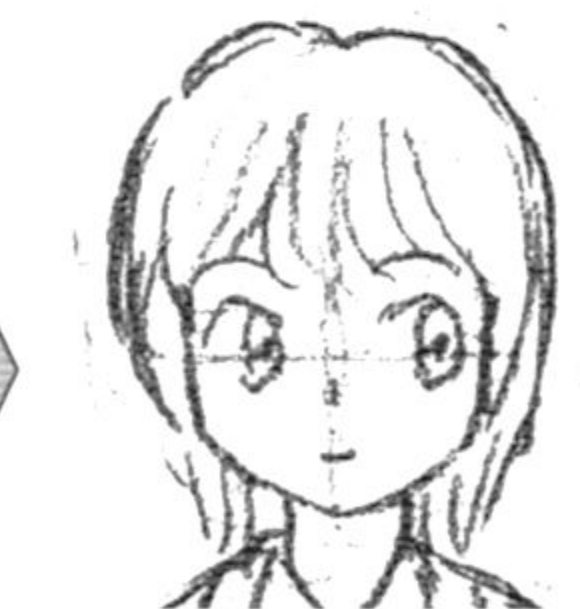
1:2.5 ratio dad



1:8 ratio daughter



1:3 ratio daughter



1:5.5 ratio daughter



Standard proportioned cat



Chibi cat



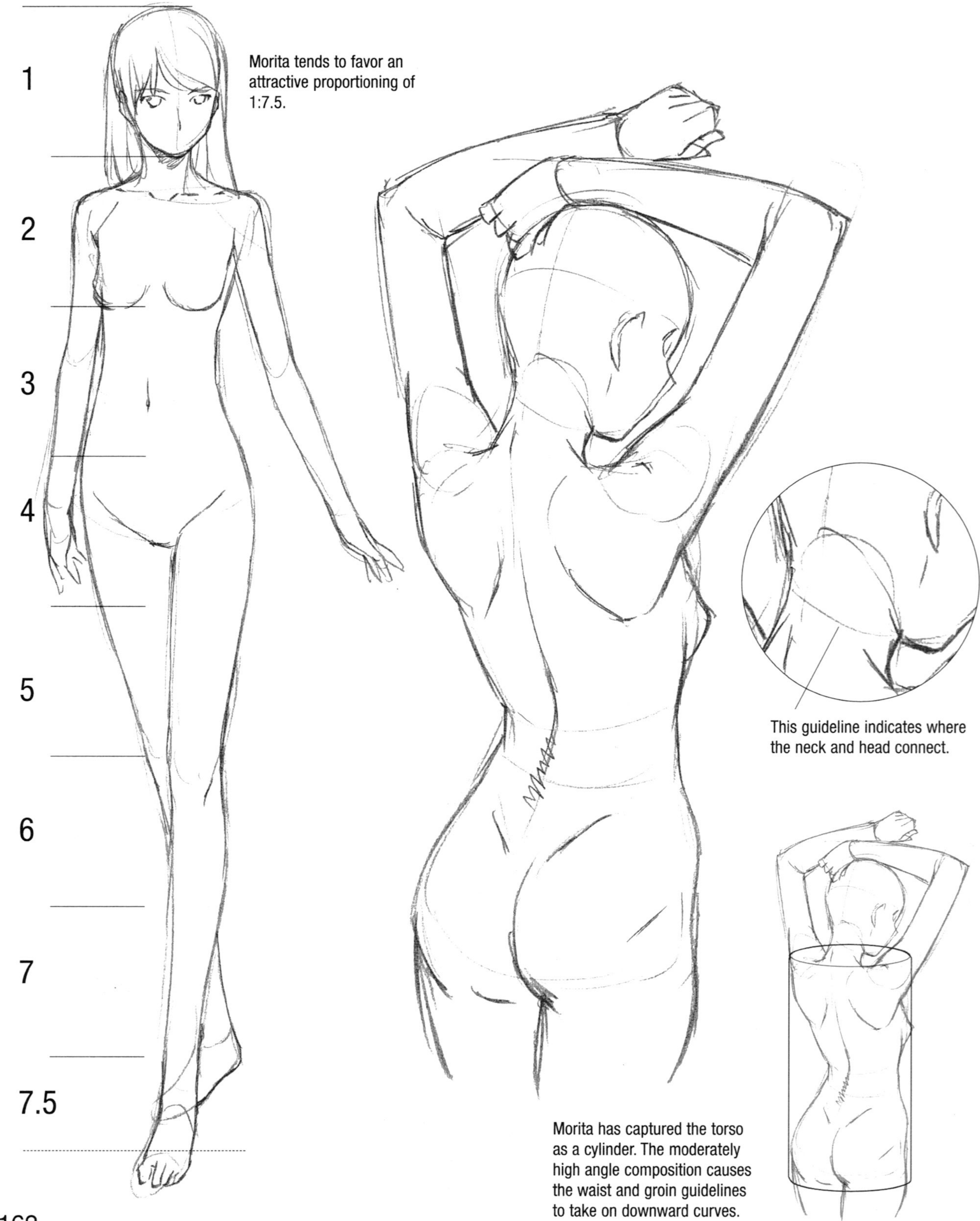
Manga-style, gigantic cat

Putting Attractive Proportion Designs to Practice

Artwork by Kazuaki Morita

Attractive Proportioning Study

There is the assumption that a 1:8 head-to-body ratio is the ideal proportioning, but there is no need to stick with that ratio slavishly. Opt for the proportional balance that you prefer.



This line captures the curved surface of the forearm and gives it a sense of three-dimensionality.

The shoulders lie along a straight line owing to the low angle composition.

This guideline denotes the boundary between the torso and the neck. It clarifies formation of the back and neck.

This marks the juncture of the chest and abdomen. It facilitates conceiving of the chest as an independent unit, allowing Morita to identify how the back and side surfaces relate to the unit as a solid.

Torso contour

This unit becomes the waist and abdomen.

This line denotes where the posterior begins.

This contour establishes the shape of the chest including the ribcage, producing the impression of a trim abdomen.

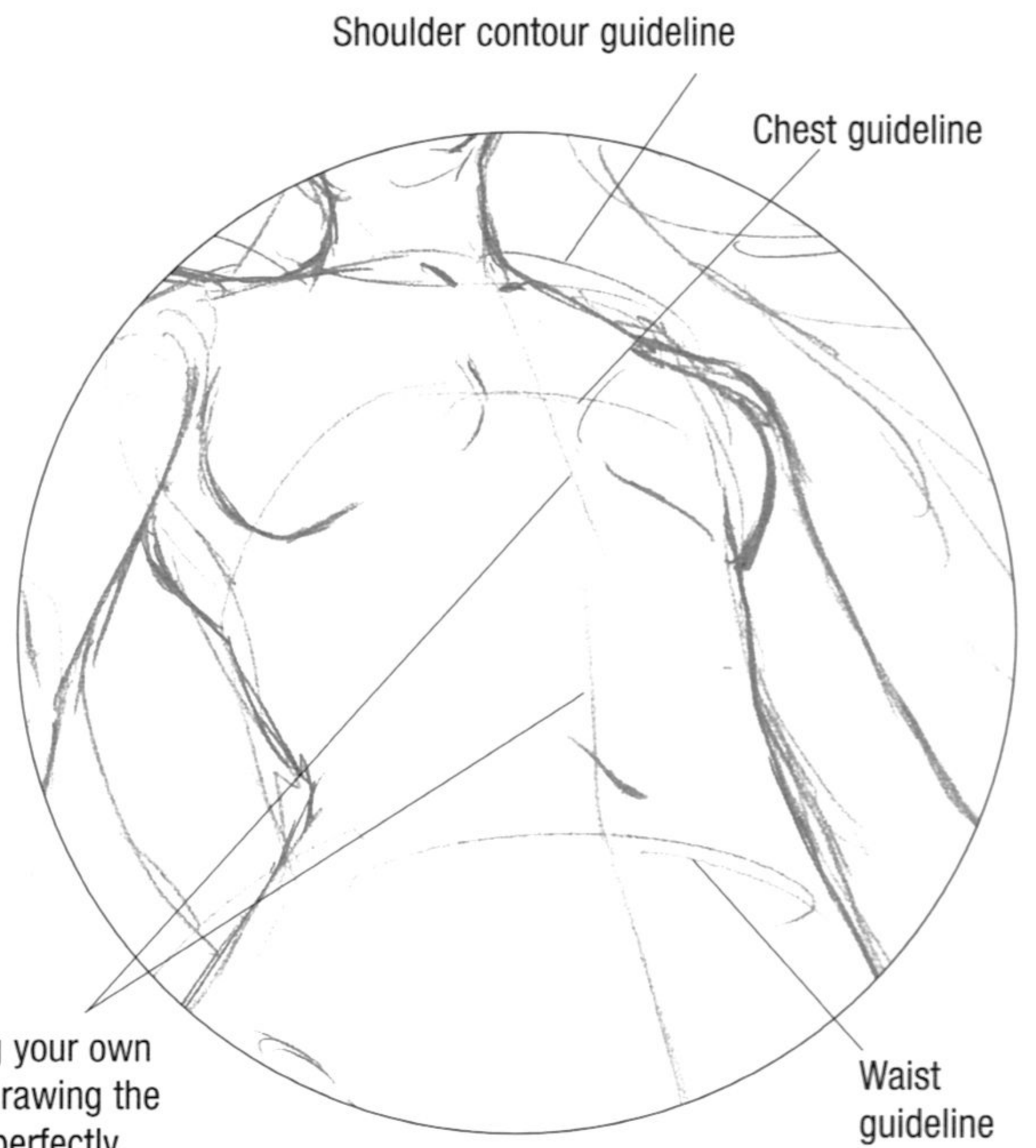
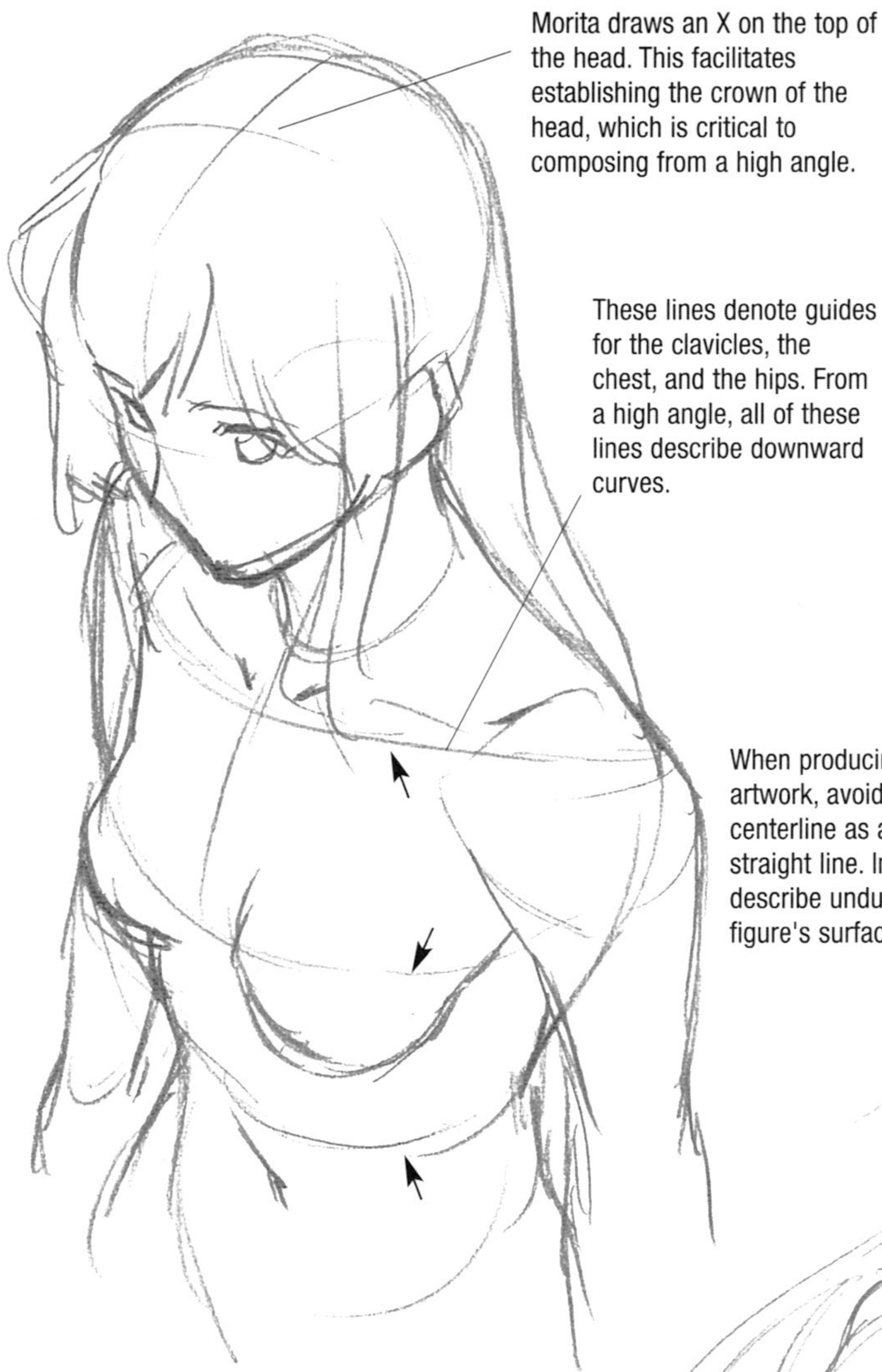
This centerline functions as a guide for the spine.

The right leg will hide this layout line in the final image, so there is no need to correct the line. It functions to indicate how the posterior and thigh connect.

This guideline denotes where the leg meets the foot.

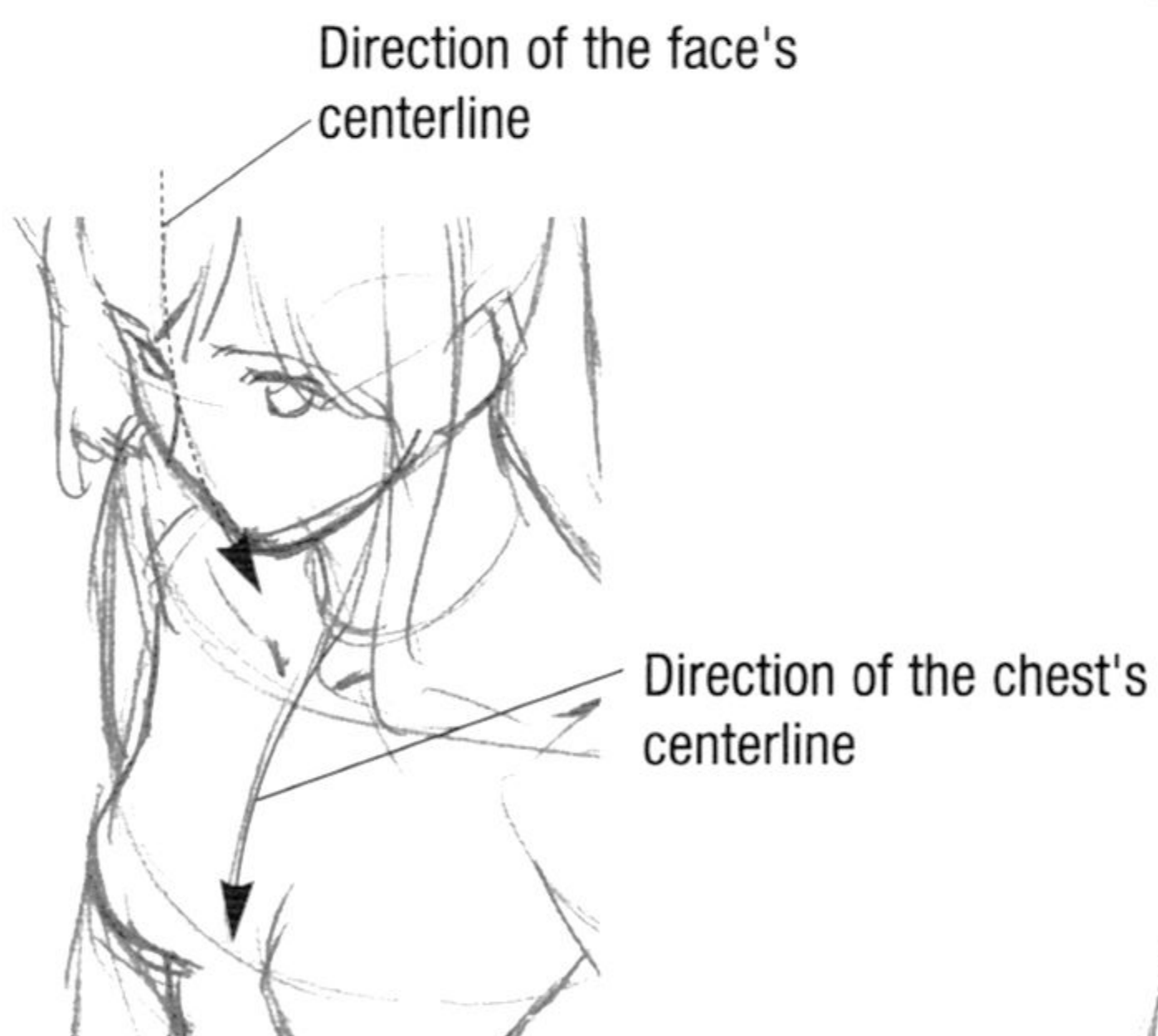
Morita captures the toes as a unit. He uses a curved line to generate a sense of volume.

The above shows where Morita adjusted the direction in which the foot faced. If an aspect of the sketch does not match the image Morita has in his mind, he fixes the drawing immediately.



When producing your own artwork, avoid drawing the centerline as a perfectly straight line. Instead, have it describe undulations on the figure's surface.

Use upward arcing curves for the shoulder, chest, and waist guidelines. This facilitates imbuing the figure with a sense of volume when composing from a low angle.

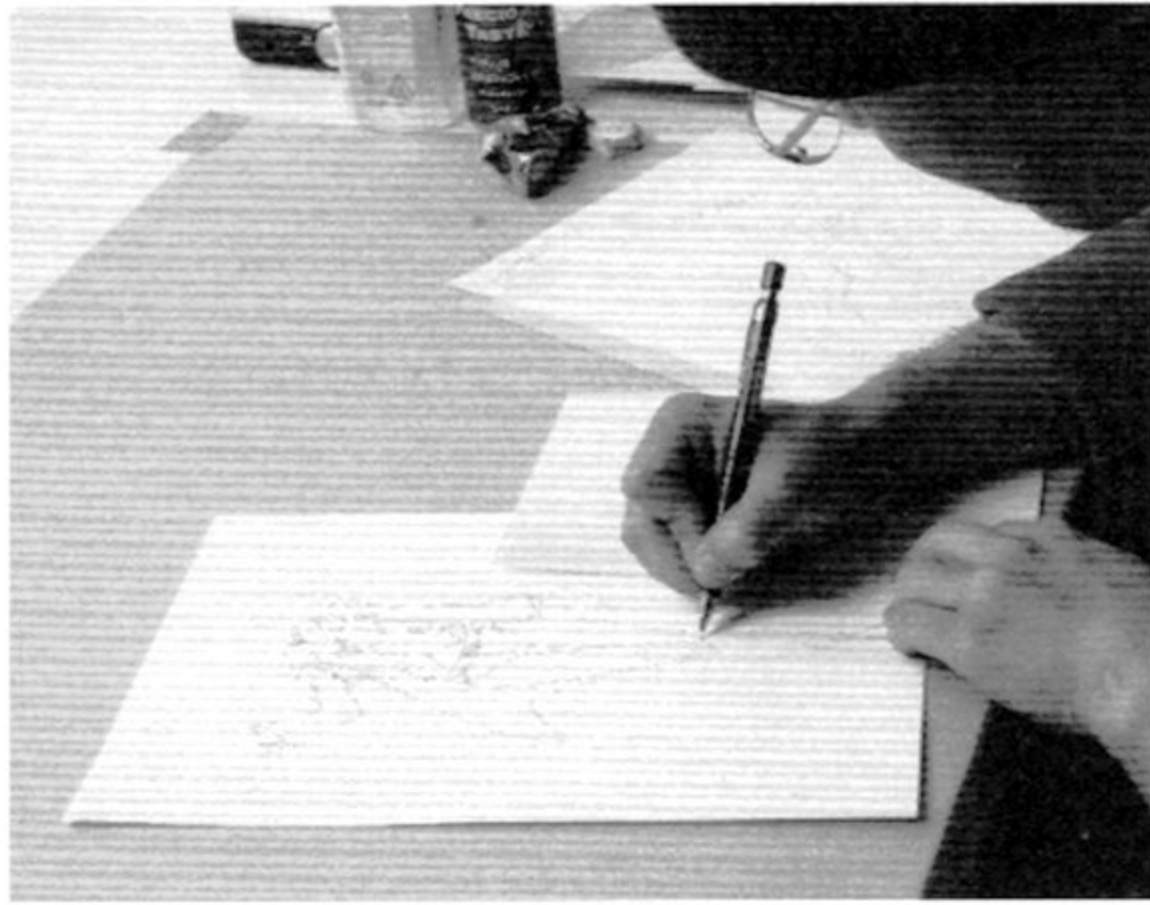


Morita draws all centerlines so that they adhere to the figure's surfaces. While the face's centerline slopes toward the body, the chest's guideline slopes outward, thereby describing the torso's depth.

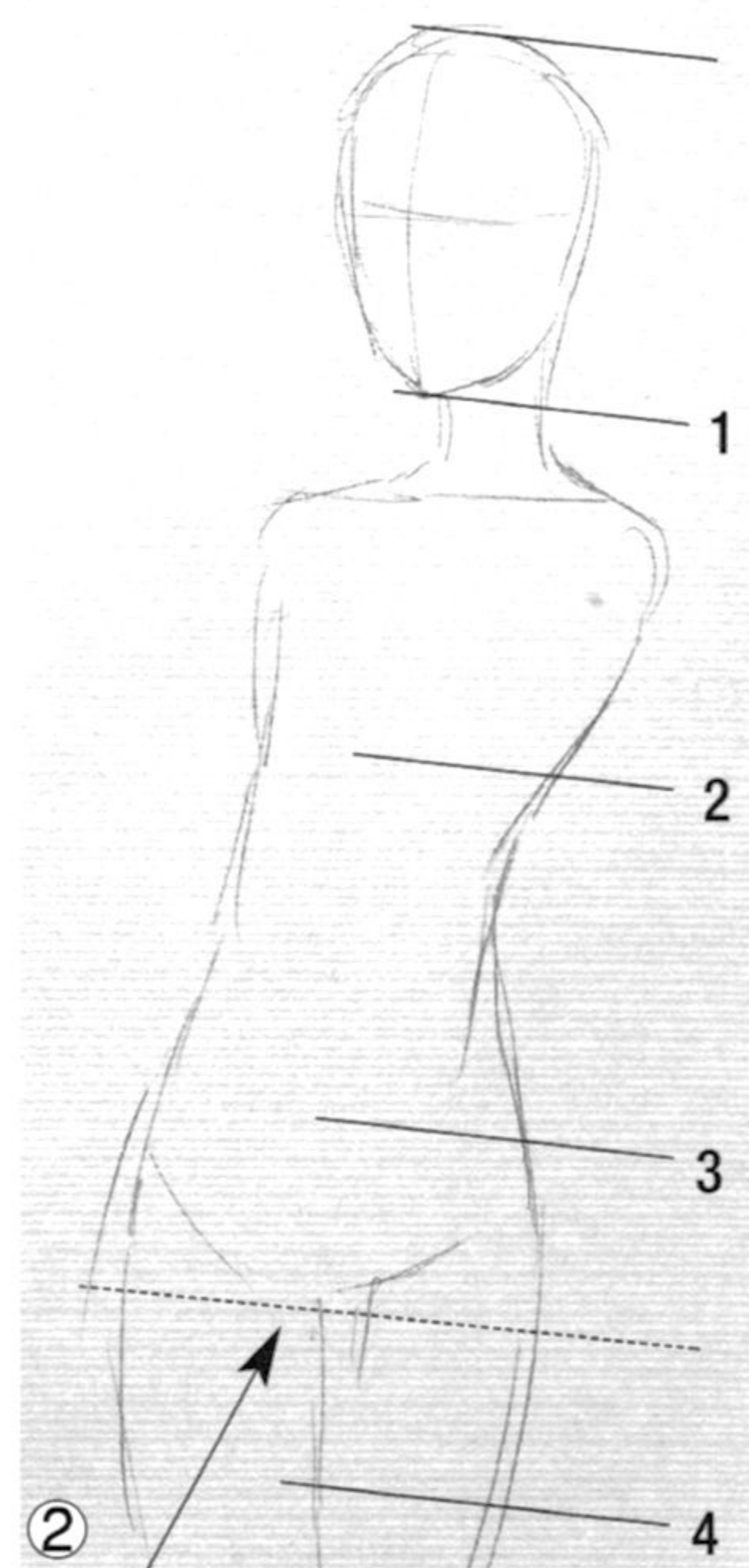


The Actual Sketching Process

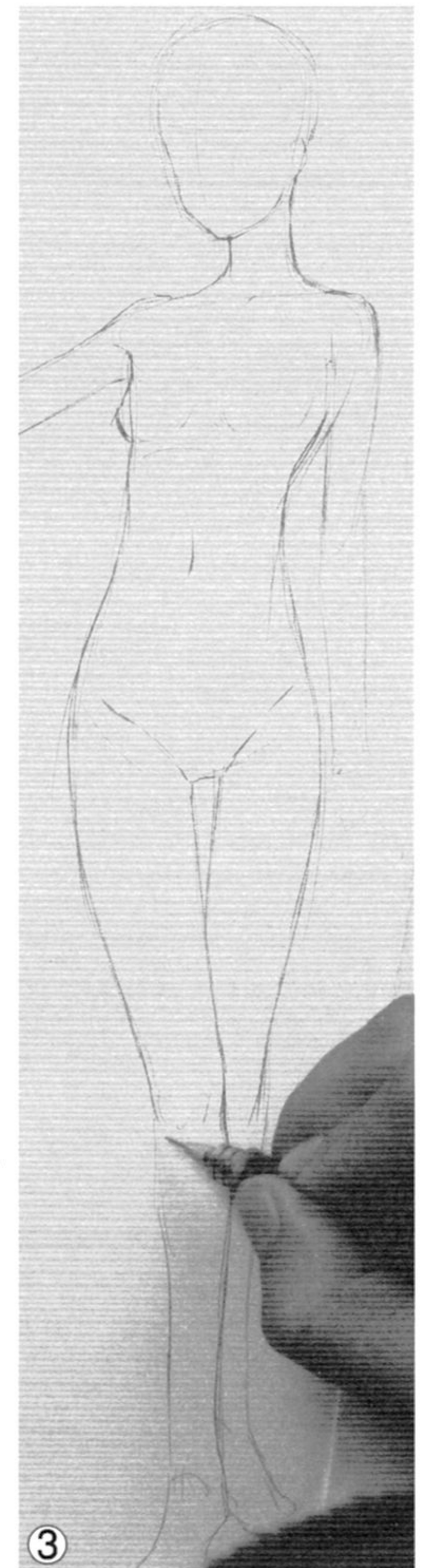
This guideline denotes where the leg meets the foot.



The head layout consists of a circle and X.

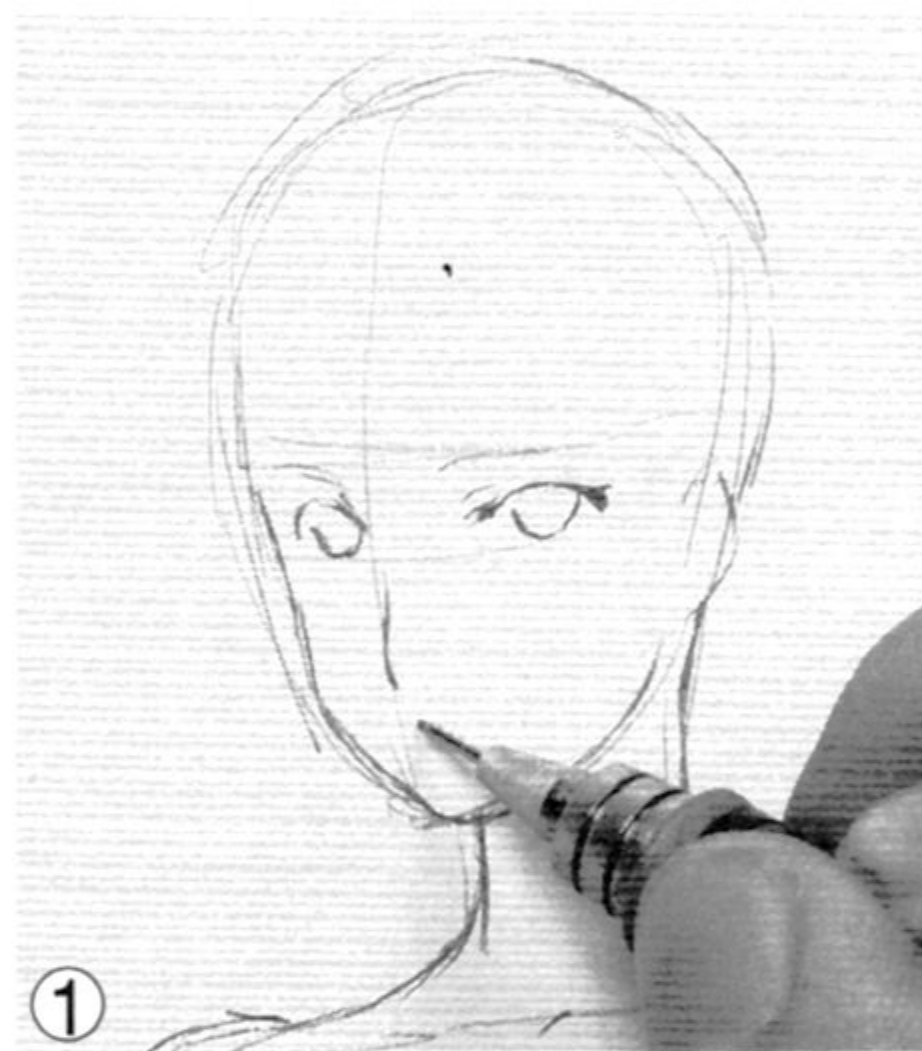


Morita positions the groin approximately 3.5 head-lengths (i.e. halfway) along the figure's full height.



Completed full figure drawing

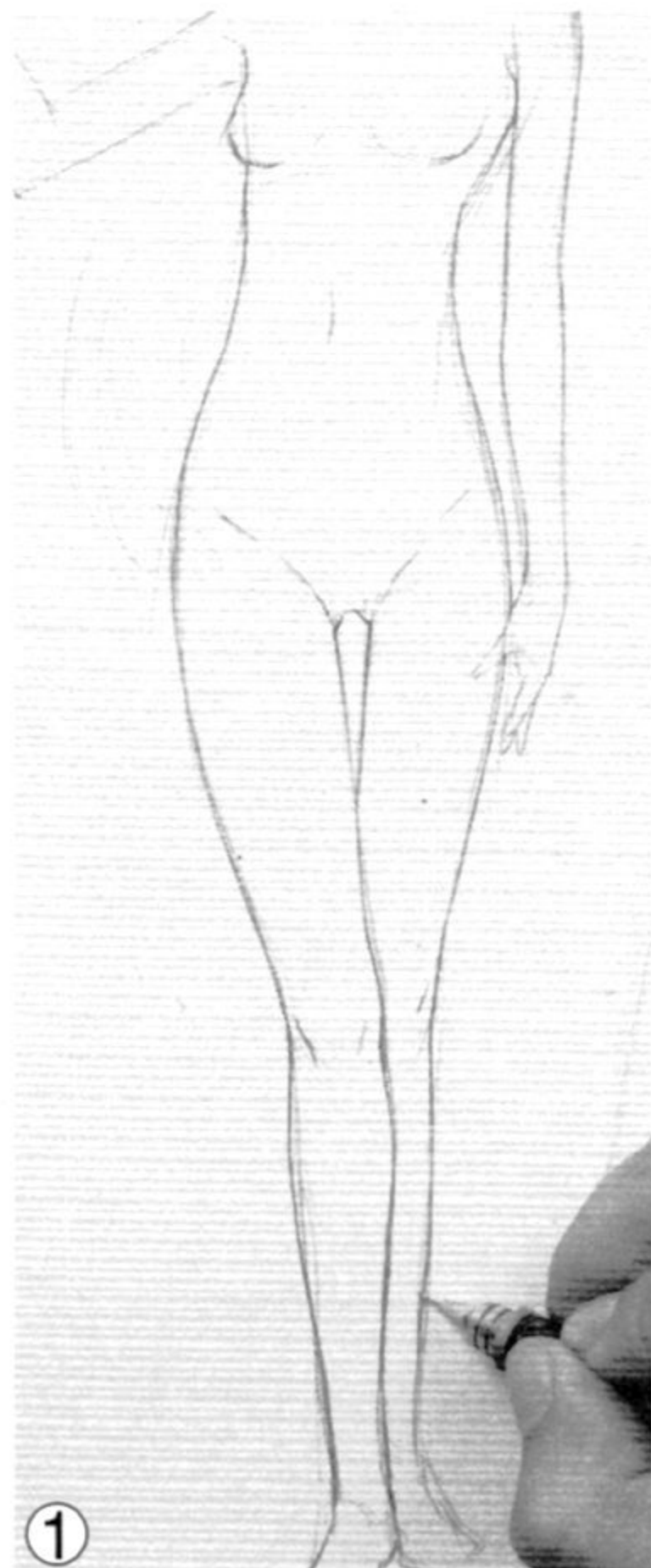
Head Layout



Morita sketches the facial features. What results may be considered the under drawing establishing the facial expression.



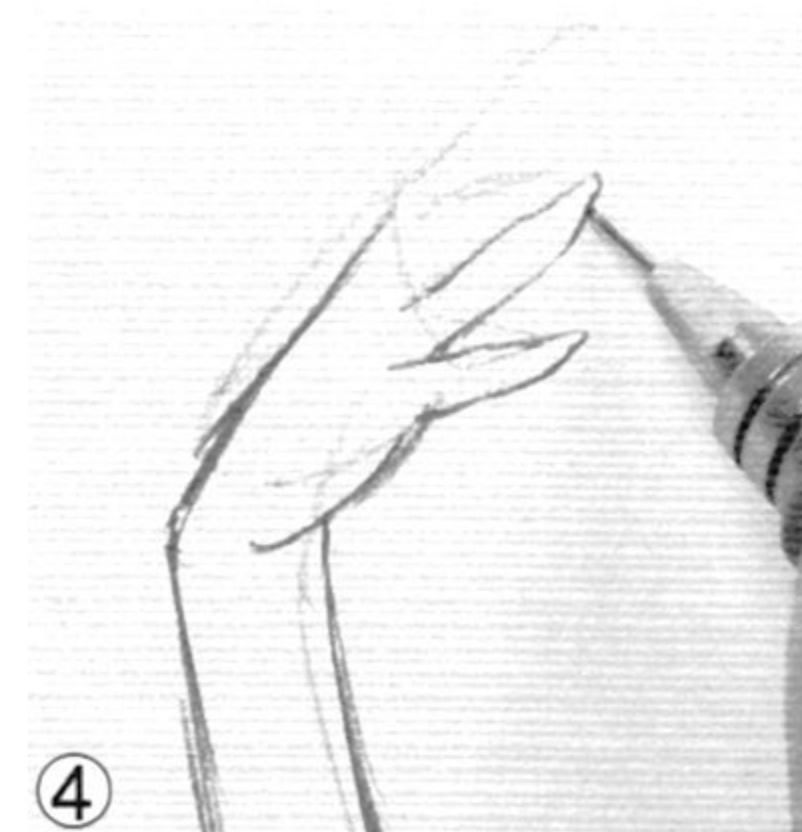
Cleaning up the Contours



A dashed line is used at the layout stage.



Morita uses dotted or dashed lines instead of solid lines for contours that will not appear in the final image.

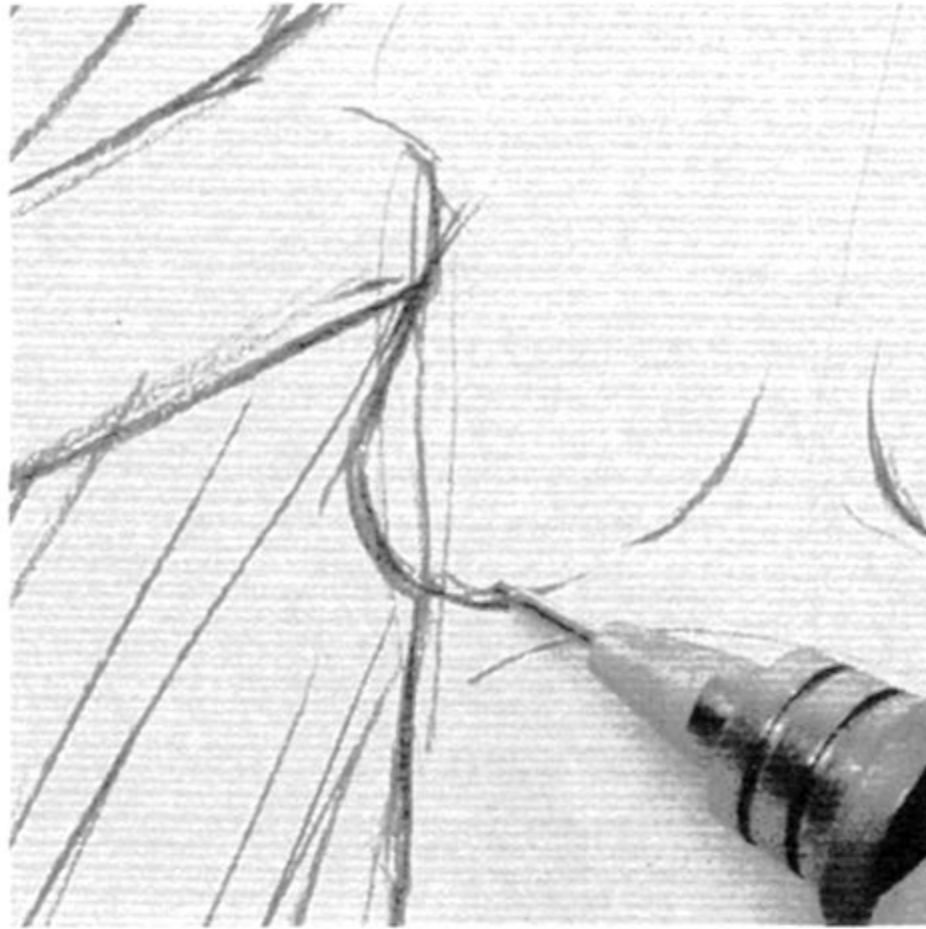


The layout's contours function as guides in establishing the forms of the various body parts. It is important for artists always to maintain a congealed image of what shapes the body parts should take.

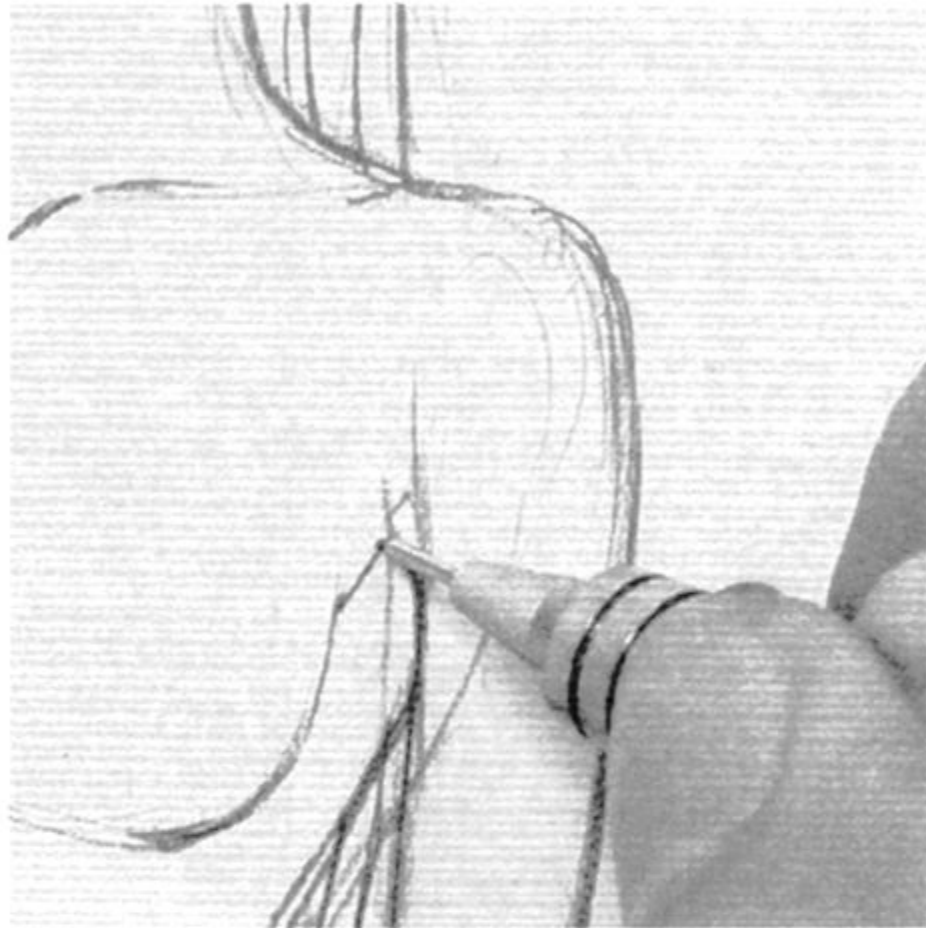
If you plan to ink the drawing immediately afterwards, or if you are a beginning artist, go ahead and pencil in a solid line through the arm.

Finishing Touches and Key Points in Evoking a Sense of Volume

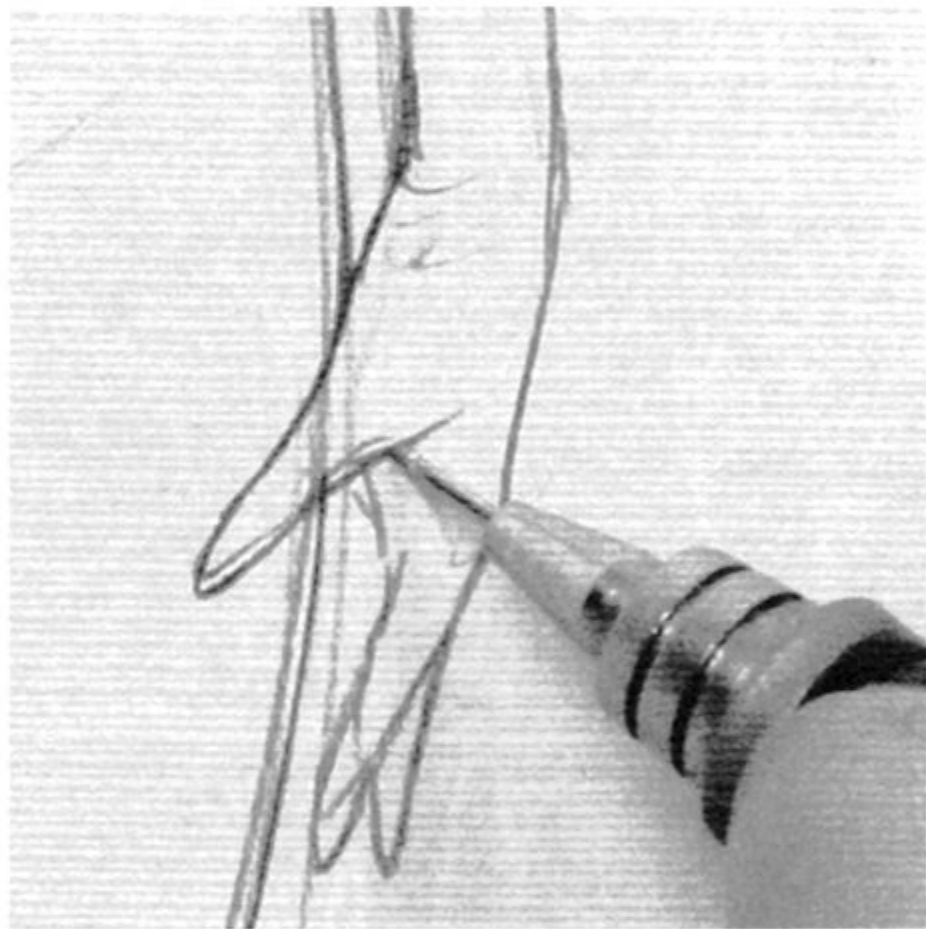
Completed Nude Sketch



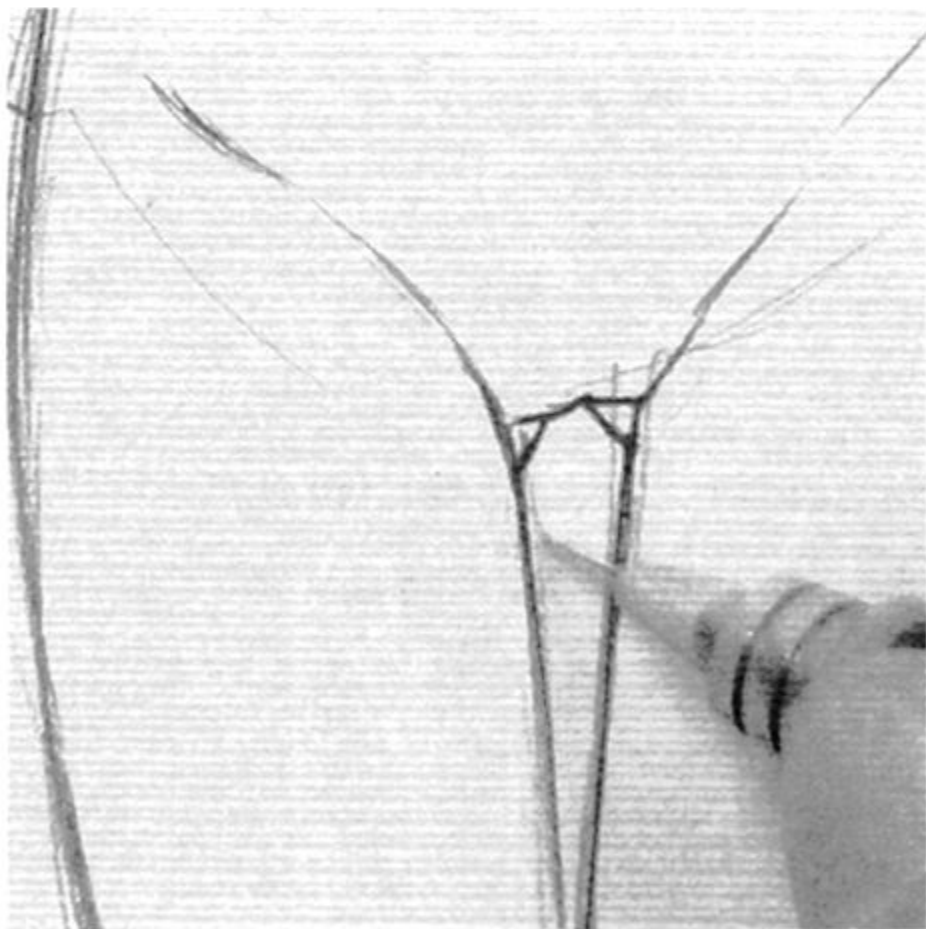
Morita reinforces the contours underneath the breasts to create the illusion of volume and impart a sense of presence.



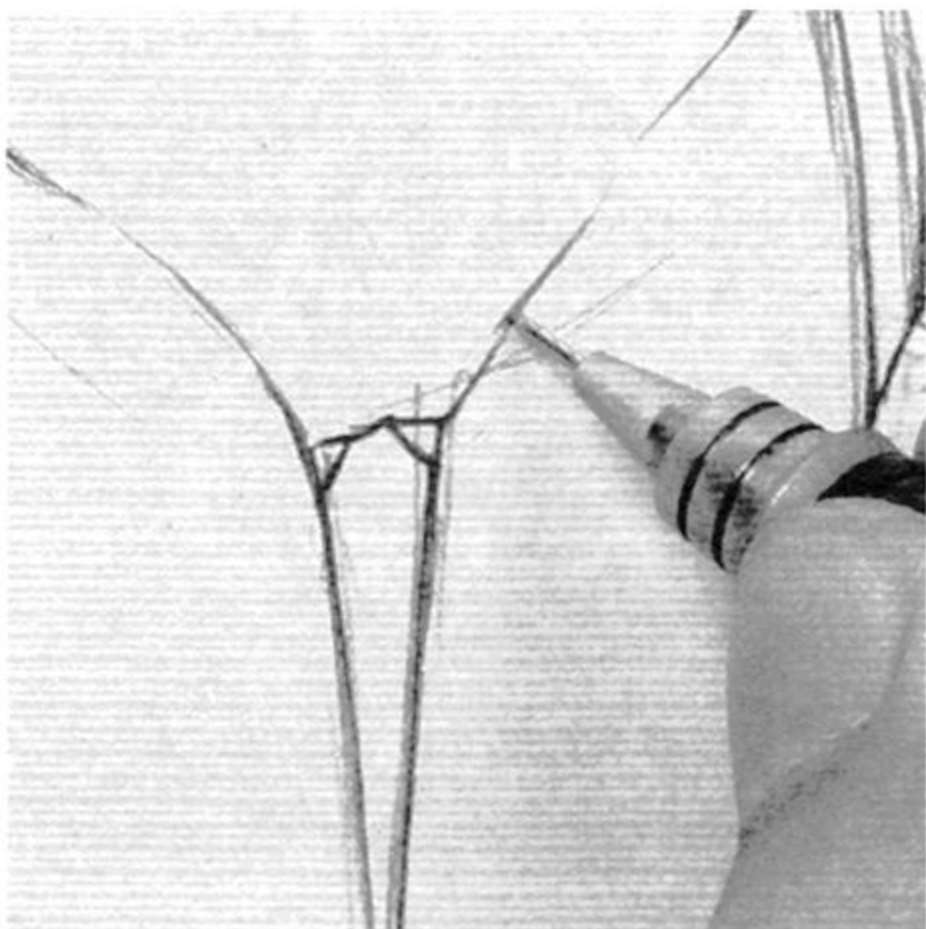
This muscle contour, which connects the underarm to the chest, generates a sense of volume for the region surrounding the underarm while giving the torso the illusion of depth.



Note how the base of the thumb and palm were executed to give the hand the illusions of depth and volume.



The manner in which the inside of the thigh has been rendered heightens the sense of volume of the cylindrical thigh.

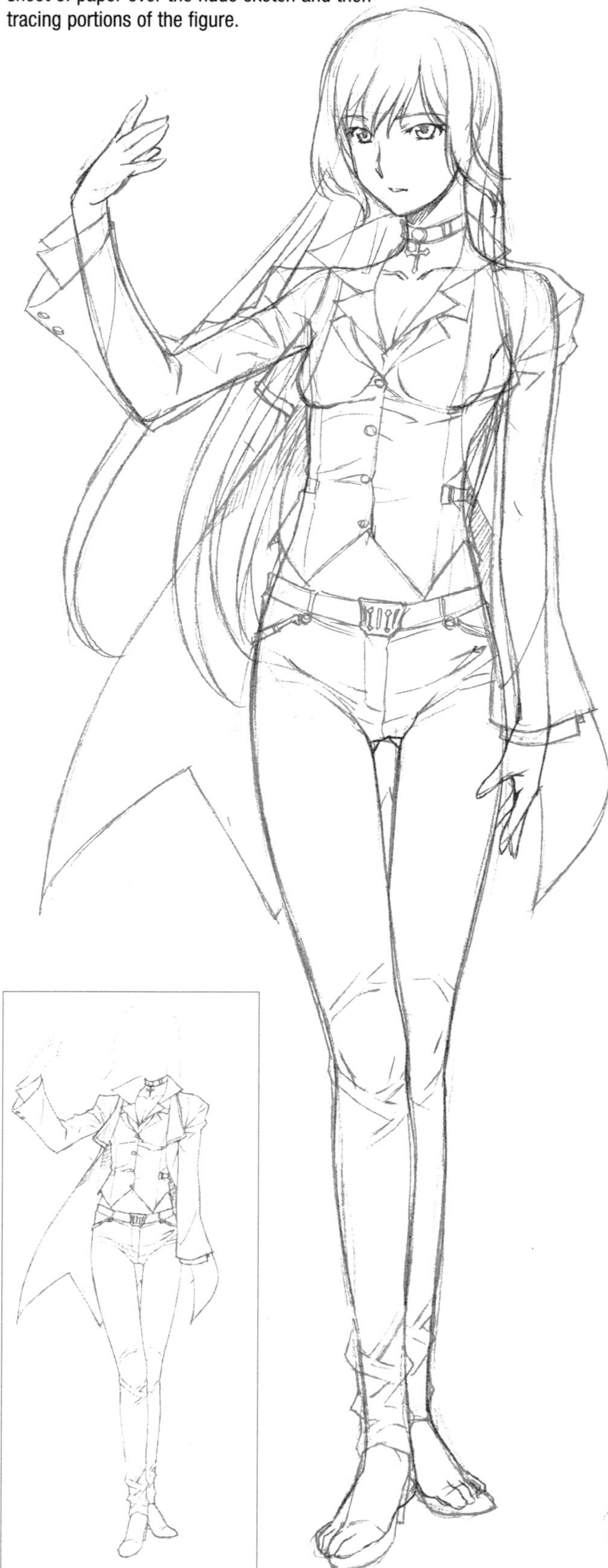


This line denoting where the leg meets the hip imbues the lower abdomen and the legs with a sense of volume.



Drawing Costumes

Morita added the clothing by laying a separate sheet of paper over the nude sketch and then tracing portions of the figure.



Morita added shoulder pads to the coat in order to portray her small but firm shoulders. He left a gap between the coat's contours and the shoulders underneath to suggest a personality fiercer than the character's body build might imply.



Morita used curved contours for the exposed cuffs. This creates the illusion of a round arm.



The arced belt contour portrays the torso's curved surface. Morita primarily used curved contours for the pants to heighten the sense of three-dimensionality in the legs.



The boots enhance the shape of the feet. The trick is to go ahead and draw a shoe with attractive contours irrespective of the actual contours of the bare foot underneath.

The costume is actually drawn on a separate sheet of paper.

Adding Tone

Upper left
light source

For your own artwork,
determine where shadows
will lie, which regions will
be left light, and which
regions will be darkened
before adding the tone.

Dark
region

Light region

Ref. Fig.: This figure
shows tone applied
according to the line proof
indicating where shadows
would be applied. Even
though this figure was
produced using the same
assumed light source,
how highlights, fabric
textures (the presence of
light reflections etc.), and
other elements are
handled produces
tremendously different
results.



Hair: 75%

Flesh shadows:
10%

Shirt shadows:
20%

Coat: 60%

Coat shadows:
80%

Vest: 30%

Vest shadows:
60%

Pants: 45%

Pant shadows:
55%

The clothing has the luster
of shiny vinyl. The
intended color palette was
black and purple. To
represent these colors in
black and white, either
gradation or solid black
tone should be used for
the coat and pants, while
a 10% random dot tone
should be used for the
hair, and a 20% random
dot tone should be used
for the coat's lining.

*The above percentages
are intended as guides for
selecting the level of
saturation with black
having a saturation level
of 100% and white having
a saturation level of 0%.
10% is a rather light
shade, while 80% is
extremely dark.

Representation of the Hair



In the figure above, highlights have been added
in bands around the head. This is the simplest
and most common mode of adding highlights,
which were created by rubbing the tone with an
abrasive ink eraser (less occasionally referred
to as a "sand eraser").



To create this
effect, a circle of
tone was etched
in a jagged
pattern to reveal
white.

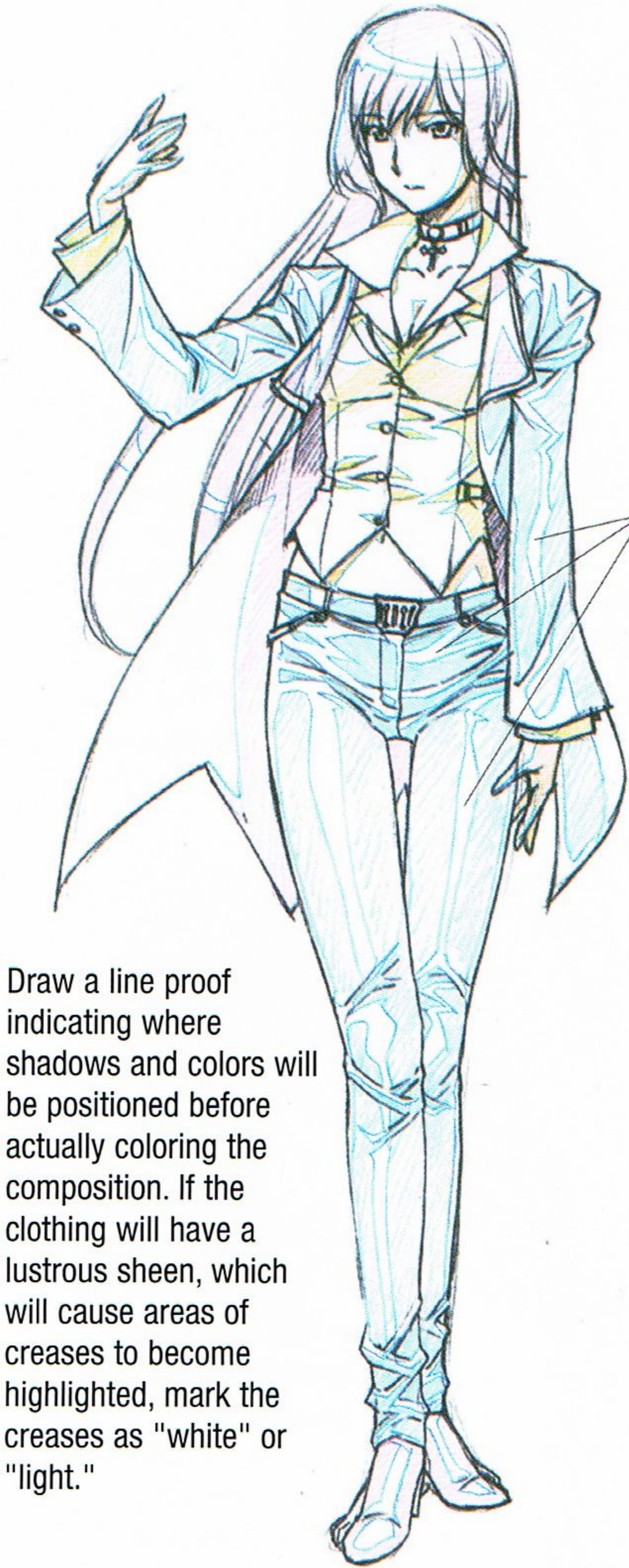


To create the above, after
having etched the tone in a
jagged pattern, another
sheet of tone was applied
on top and then etched in
strategic areas.

Coloration

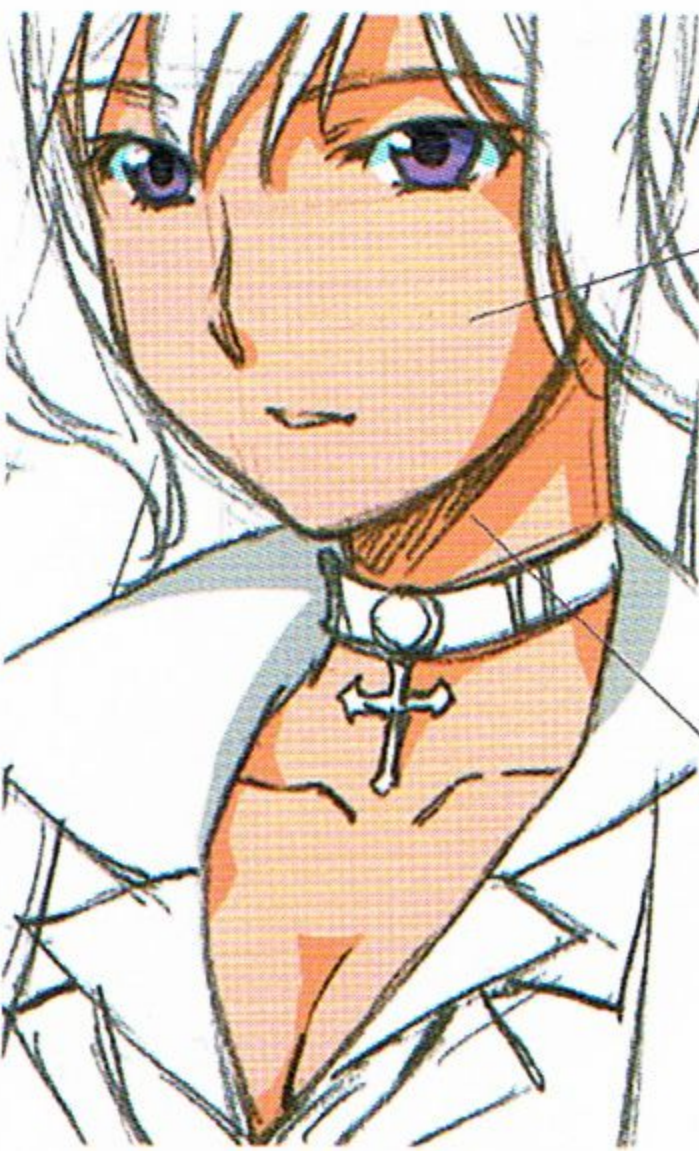
Anime Cel Coloring

Clearly delineating the shapes of areas of shadows and areas of reflected light results in a coloration akin to an animation cel.



This line proof contains contours indicating where luster highlights would appear on the shiny vinyl costume.

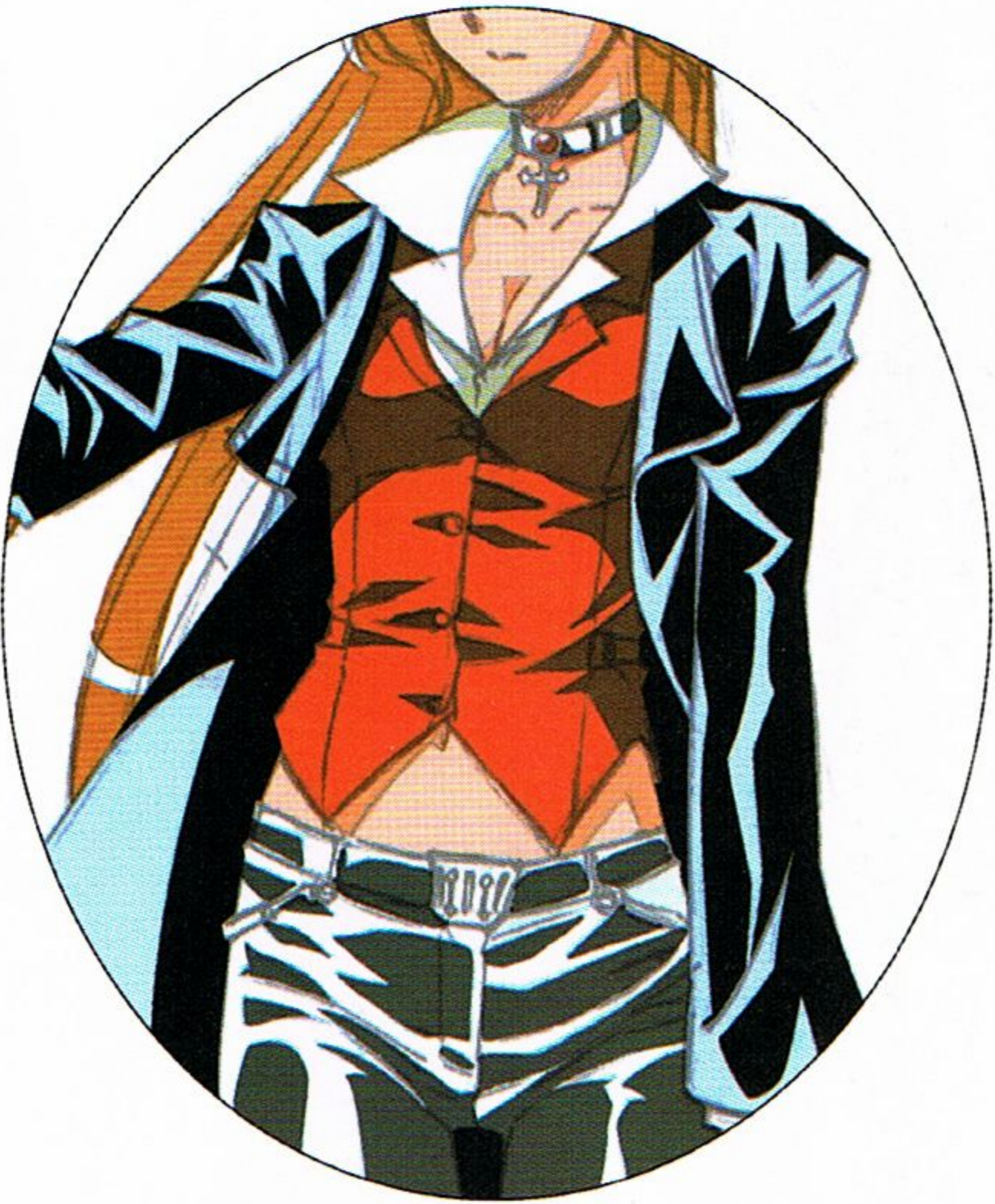
Draw a line proof indicating where shadows and colors will be positioned before actually coloring the composition. If the clothing will have a lustrous sheen, which will cause areas of creases to become highlighted, mark the creases as "white" or "light."



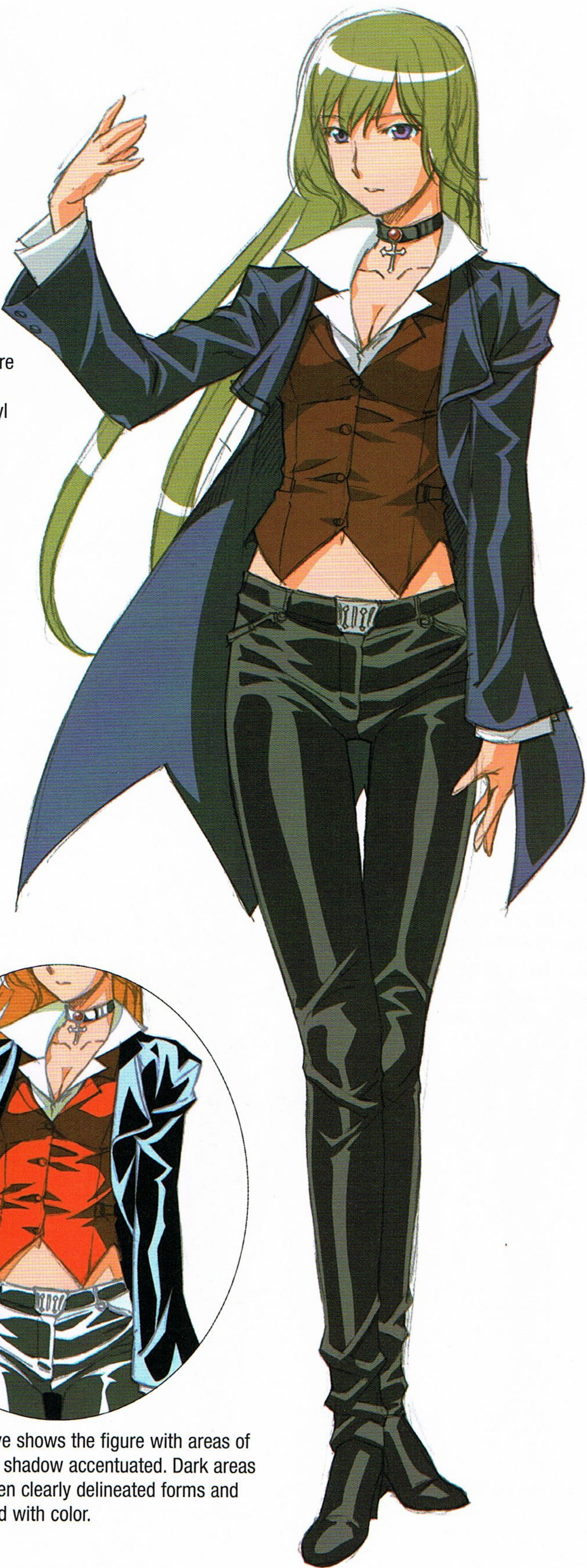
| | |
|--------------|------------|
| Flesh | C0% |
| | M24% |
| | Y25% |
| | K0% |
| Flesh shadow | C2% |
| | M47% |
| | Y54% |
| | K0% |

Color flesh shadows as indicated in the line proof. It is important to conceive of the subject as a solid at the line proof stage.

*The four-color printing process is often referred to as the "CMYK process" as it involves the use of the colors Cyan, Magenta, Yellow, and black (letters of acronym capitalized). A mixture containing 2% cyan, 47% magenta, and 54% yellow produces a color that may be used to represent "flesh shadows."



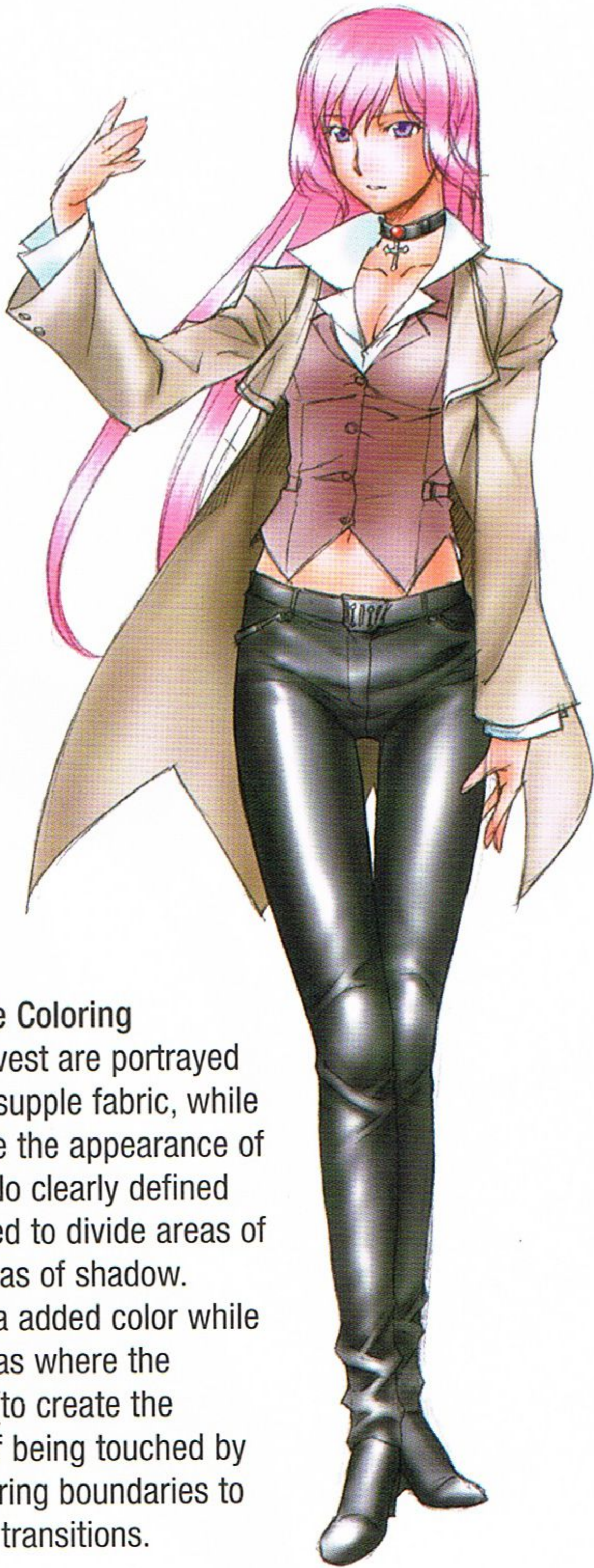
The above shows the figure with areas of light and shadow accentuated. Dark areas were given clearly delineated forms and then filled with color.



All about Coloring



Animation Cel-Style Coloring
In this version, the material of the coat and pants has been portrayed as cloth. Coloring following the same process as outline previously. First, the shadows were given clearly defined forms, and then the color was added.



Airbrush-Style Coloring
The coat and vest are portrayed as made of a supple fabric, while the pants have the appearance of tight leather. No clearly defined lines were used to divide areas of color from areas of shadow. Instead, Morita added color while lightening areas where the surface rises (to create the appearance of being touched by light) and blurring boundaries to achieve fuzzy transitions.



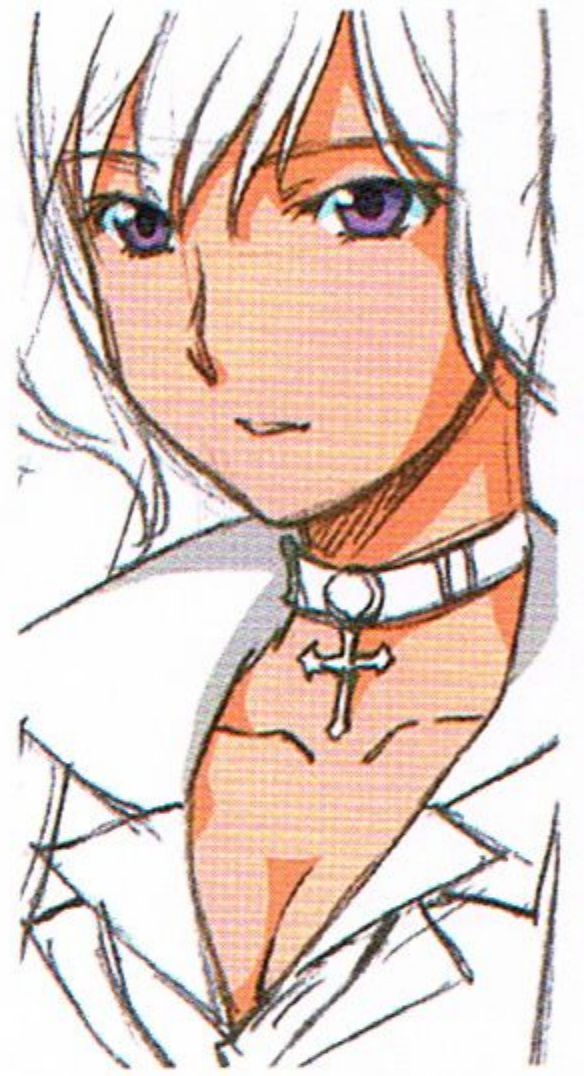
Airbrush version

The hair's color was changed to match the hue of the coat.

To create this effect, Morita used a dark color for the vest and gave the pants a dull sheen. This heightened the contrast between the vest and the coat, resulting in a distinct visual effect, even when viewed from a distance.

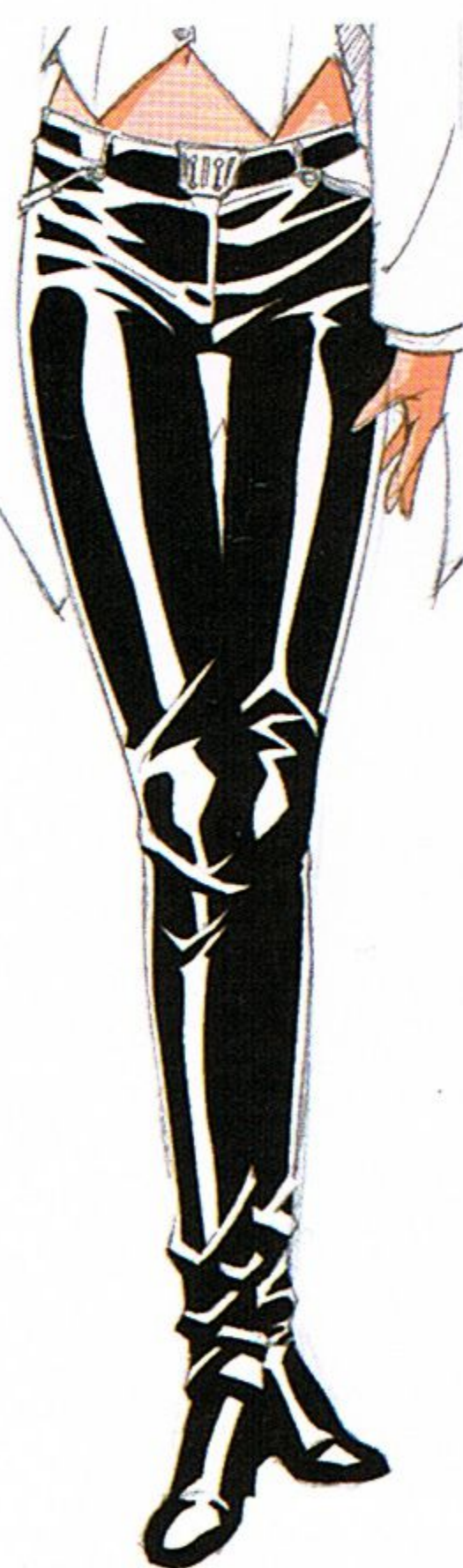


Airbrush-style skin

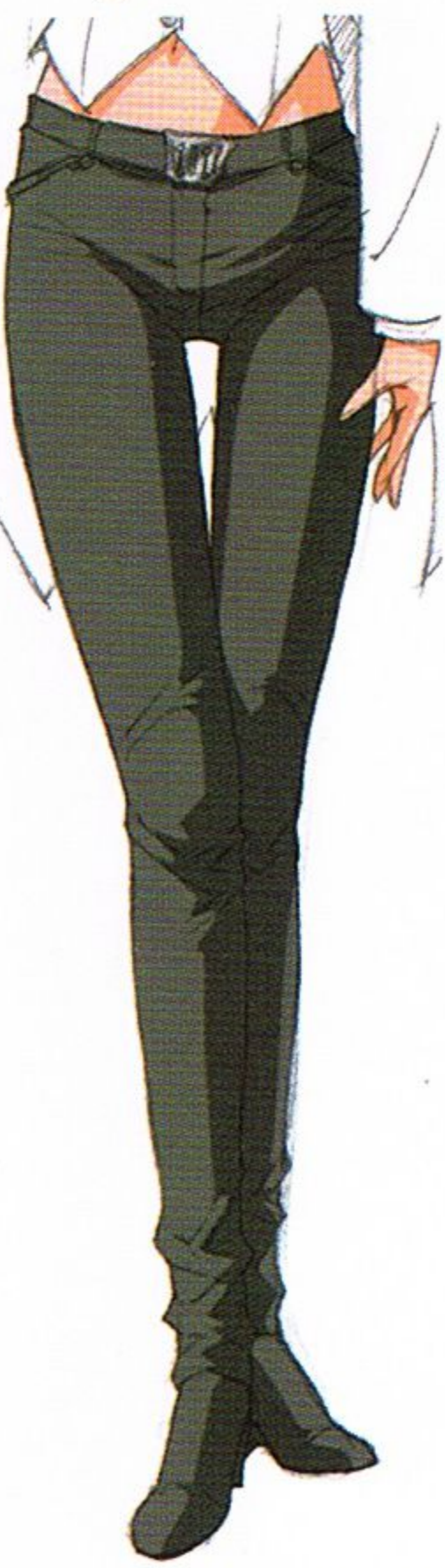


Animation cel-style skin

How Execution of Light and Shadow Yields Different Textures



Exaggerating the contrast of black and white produces the illusion of shiny vinyl.



Jeans or tight pants



Adding a lustrous sheen and then blurring borders create the look of leather.



Eliminate a sense of sheen to produce a cloth-like effect.



To create the look of latex, accentuate the contrast between light and dark by blackening the pants overall and then blurring borders while retaining a lustrous sheen.

Coloring the Cover Illustration

Color large areas first.

Basic Steps When coloring large compositions, start with characters drawn using attractive proportions.



① Color the skin.



② Color the hair and clothing.

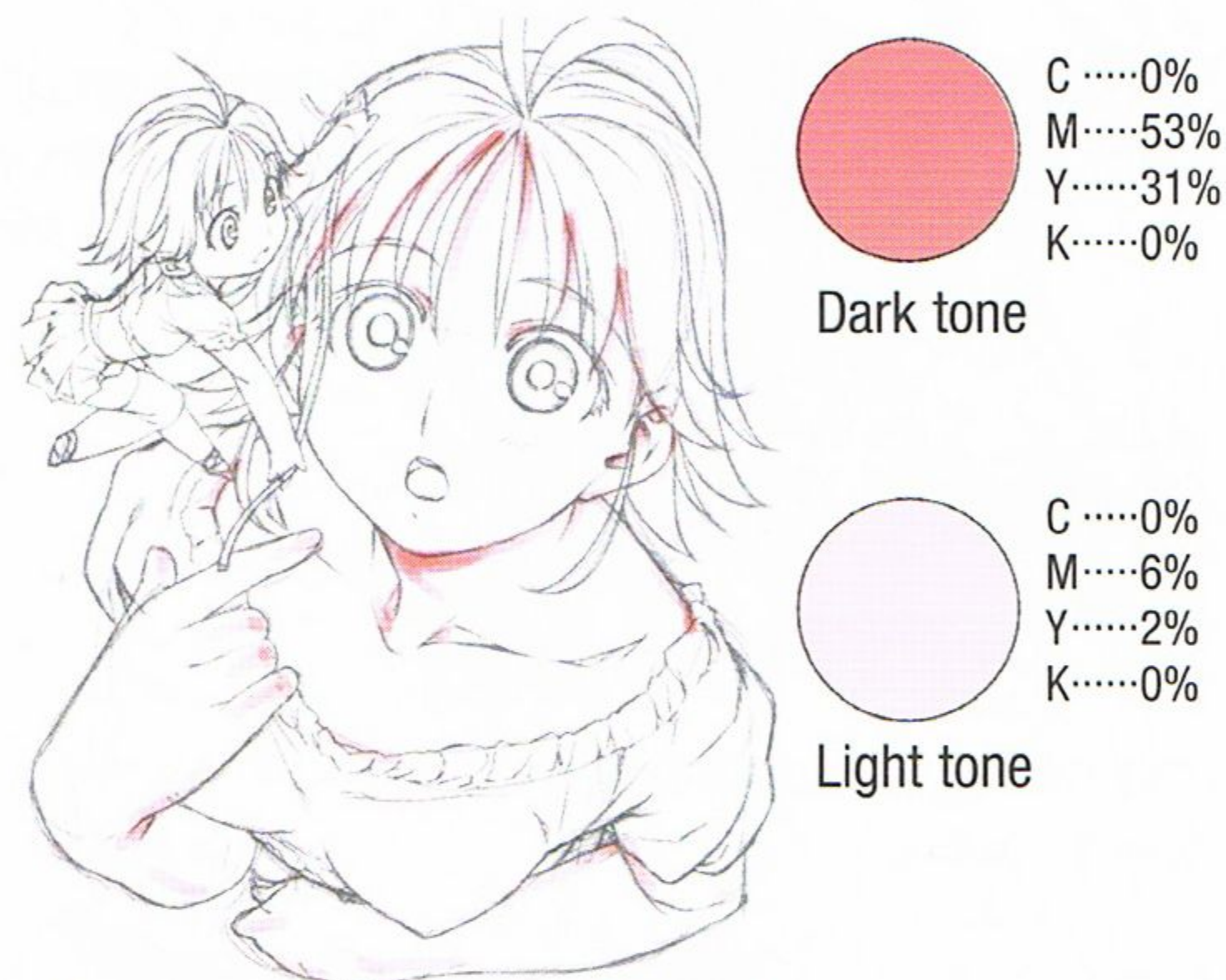
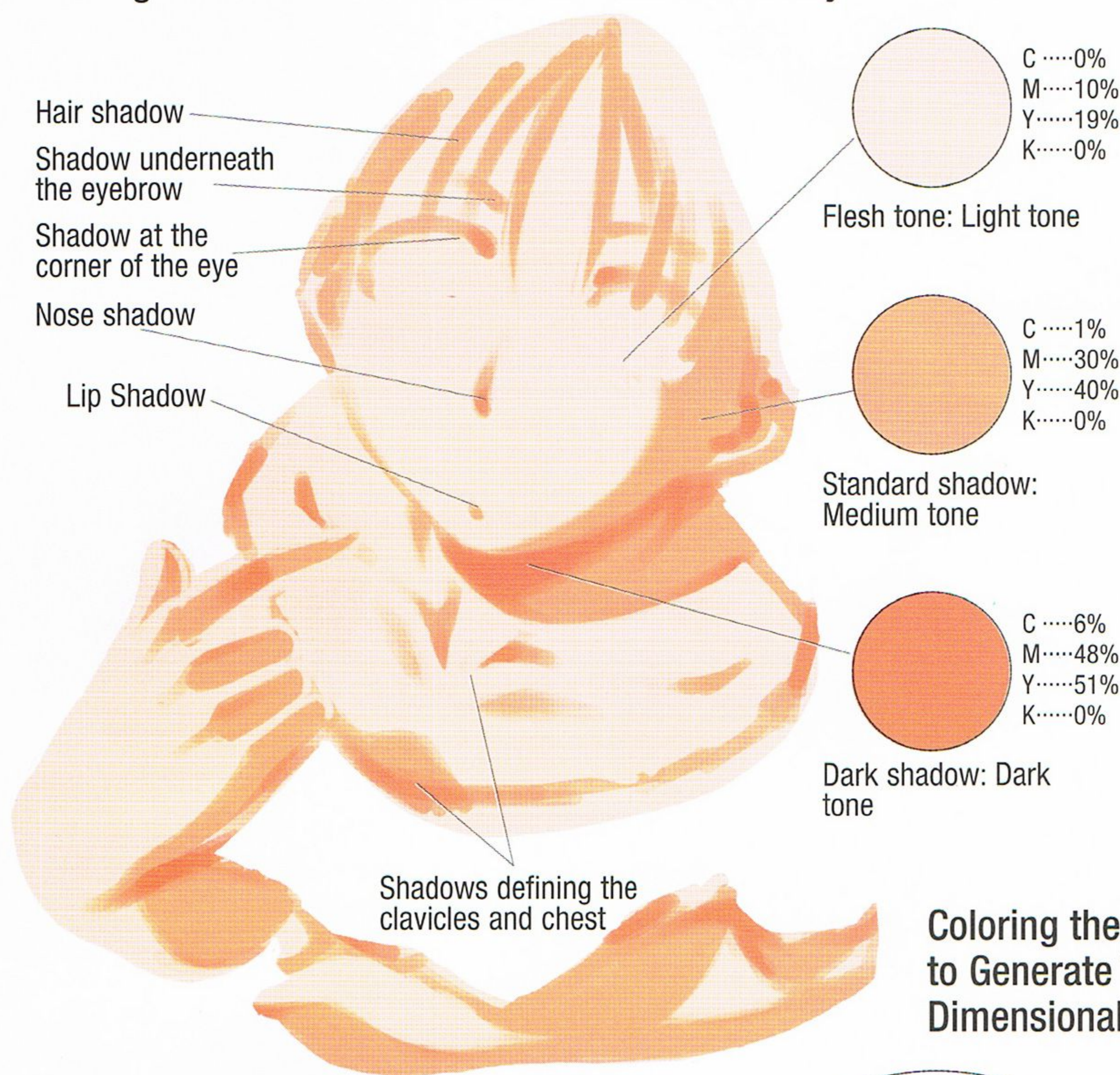


③ Add a shine to the hair and color the mouth.



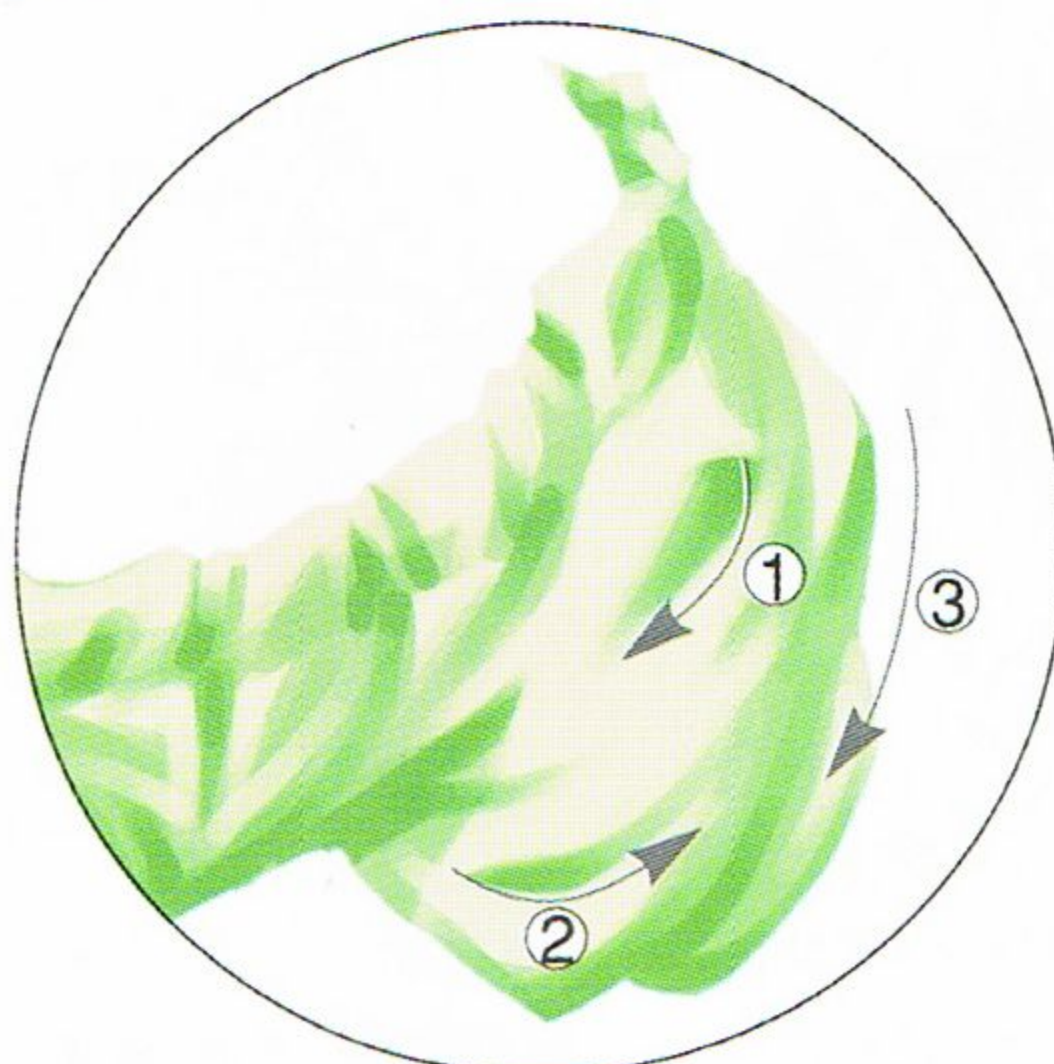
④ Color the irises and pupils and add highlights. Add red blush to the cheeks to finish.

Coloring the Skin to Generate Three-Dimensionality



Darken hair roots and underneath the chin to create visual accents. This will enhance the sense of three-dimensionality.

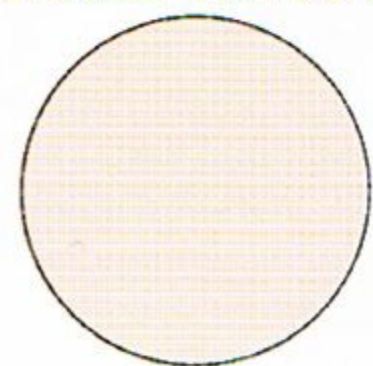
Coloring the Hair and Clothing to Generate Three-Dimensionality



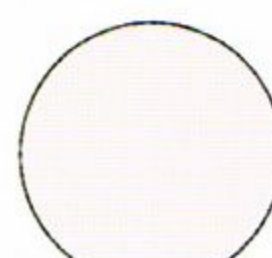
Alternate light and dark shades using curved strokes while visualizing the arm as a solid.



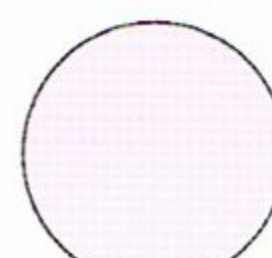
The four basic colors may be mixed to create various hues.



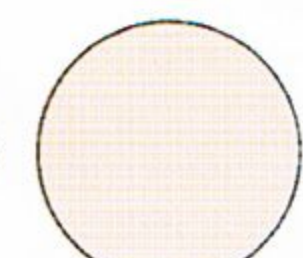
Composition of a light flesh tone
C (Cyan)···0%
M (Magenta)···10%
Y (Yellow)···19%
K (Black)···0%



Y (Yellow)
19%

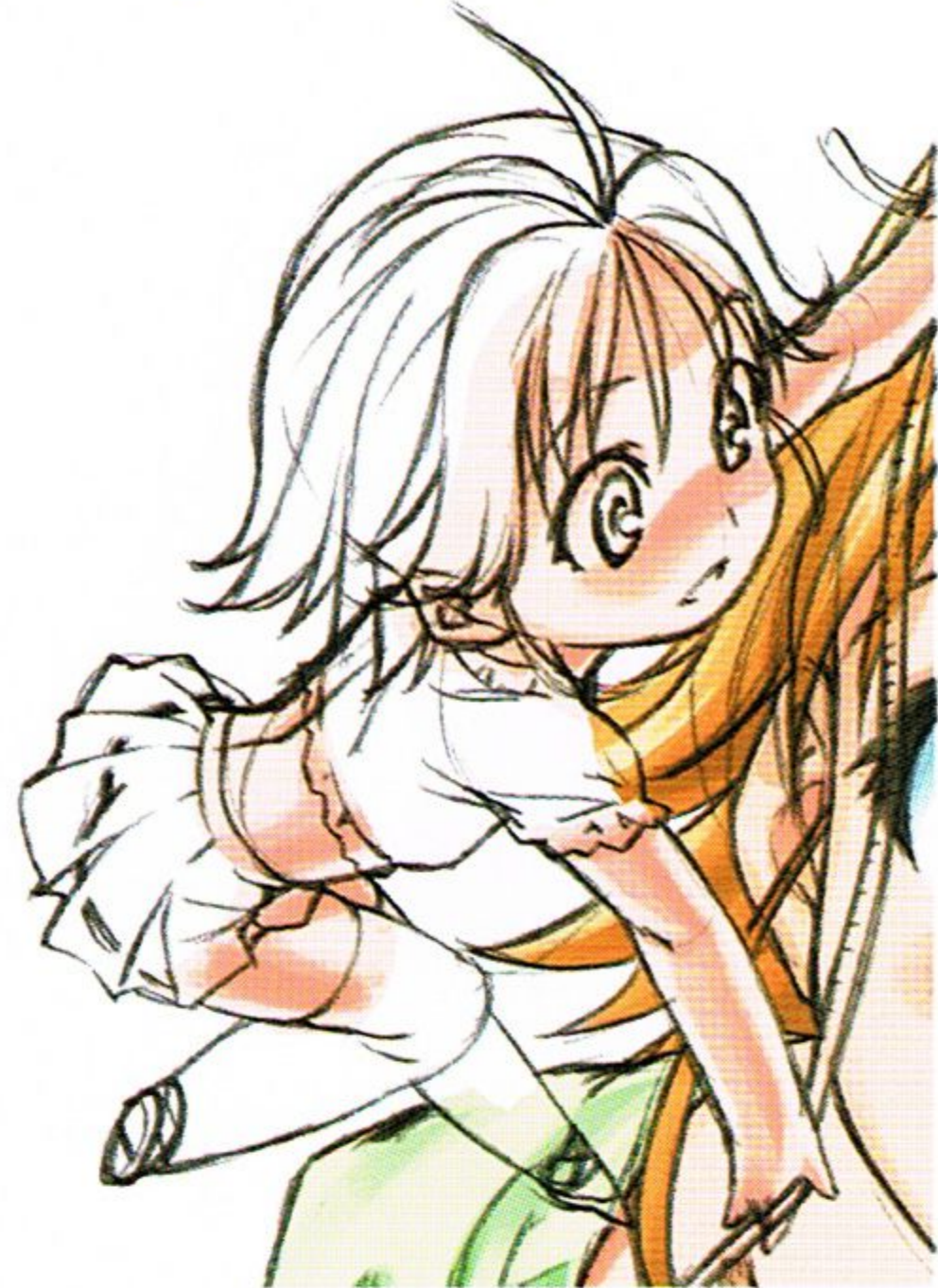


M (Magenta)
10%

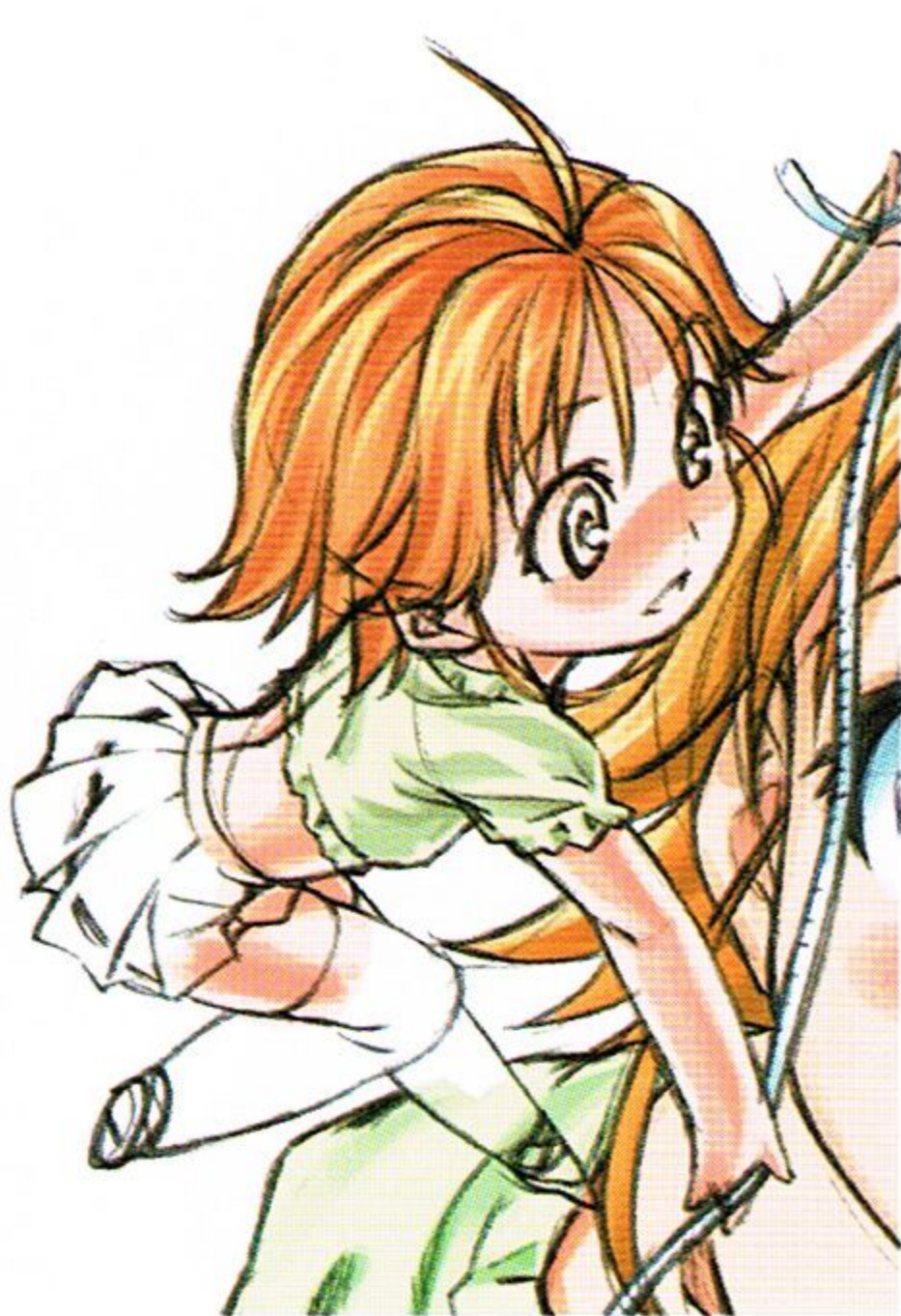


Completed
flesh tone

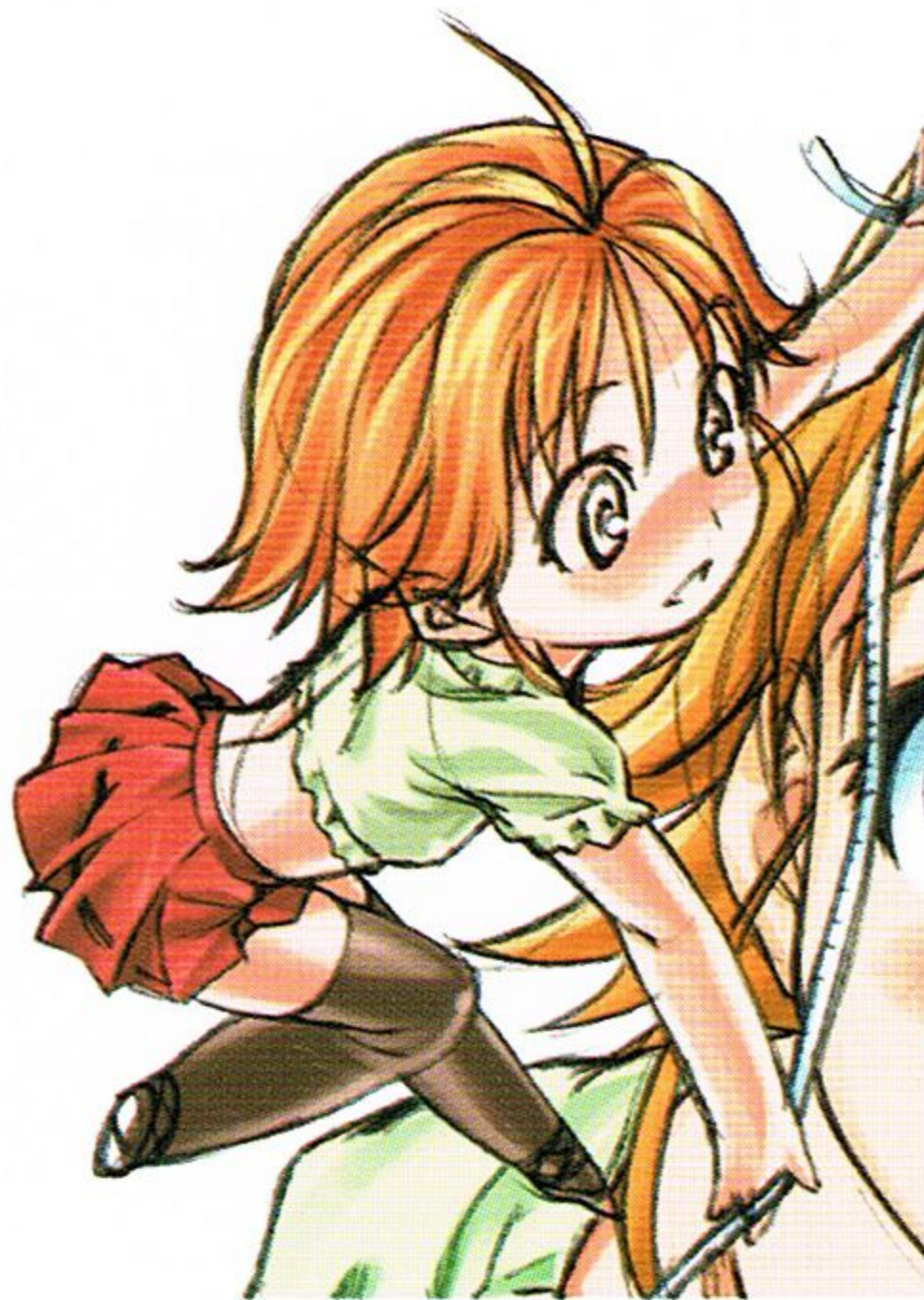
Coloring *Chibi* (Super-deformed) Characters



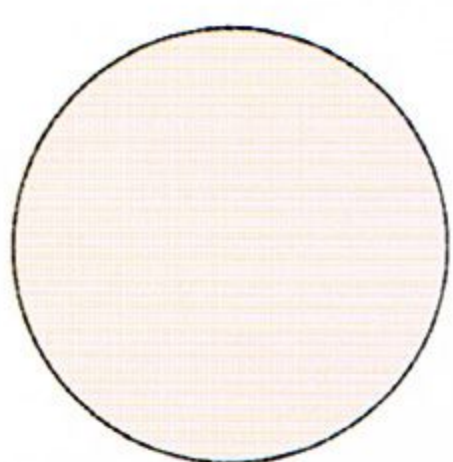
① Color the skin.



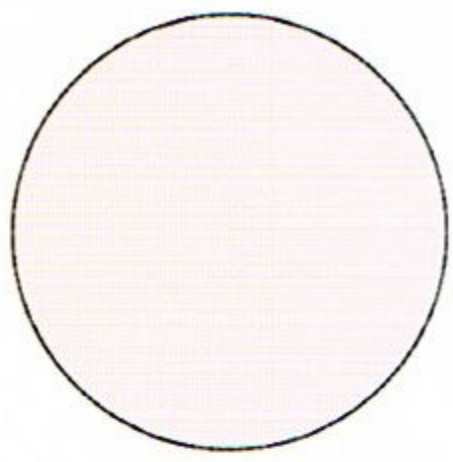
② Color the hair and the clothing.



③ Color the skirt and stockings.



Flesh tone used for the attractively proportioned character

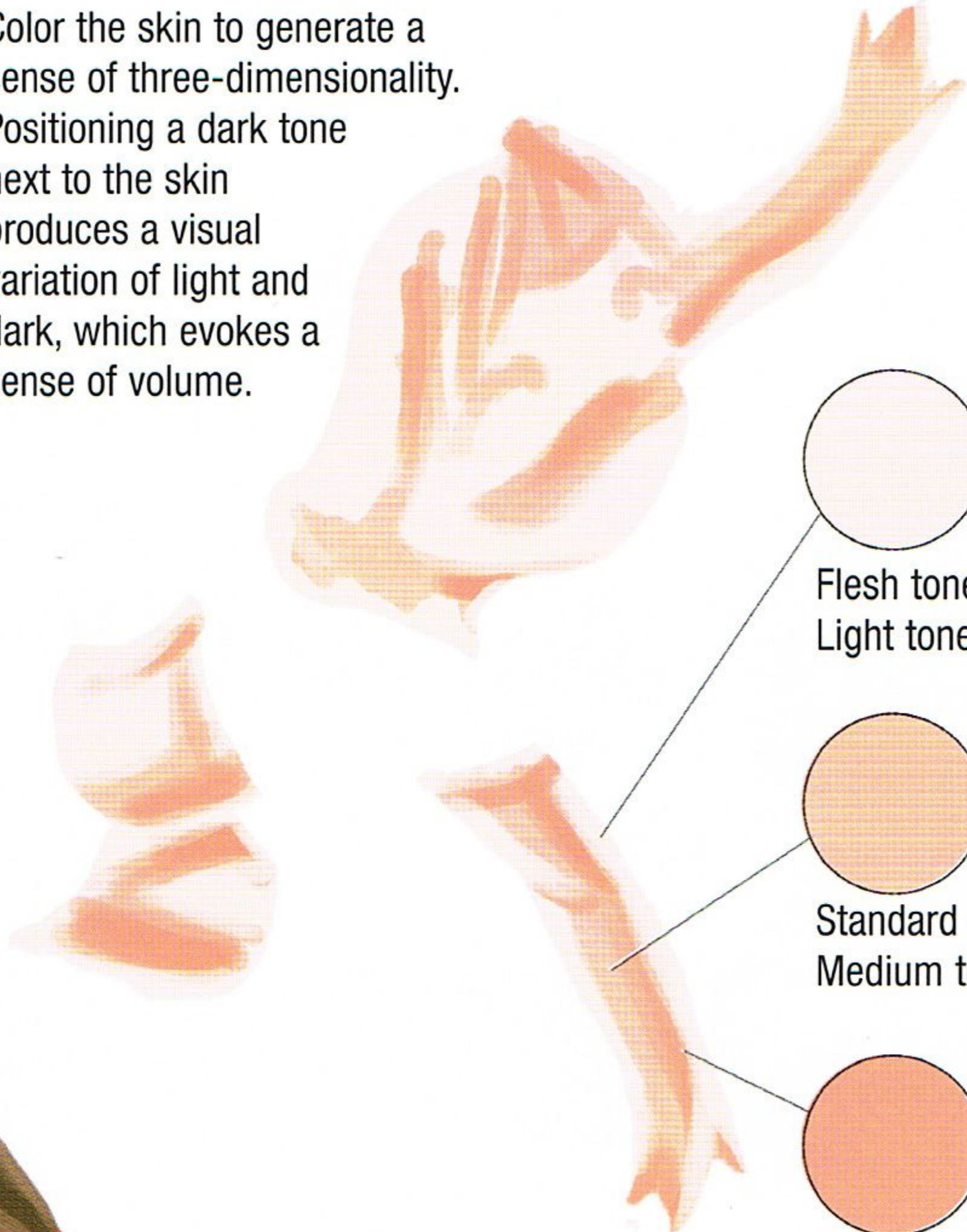


The flesh tone selected for the *chibi* character in this composition has more yellow but is a lighter tone than that used with the attractively proportioned character.



Color the small face in simple swaths of hue.

Color the skin to generate a sense of three-dimensionality. Positioning a dark tone next to the skin produces a visual variation of light and dark, which evokes a sense of volume.



C0%
M7%
Y13%
K0%

Flesh tone:
Light tone

C0%
M28%
Y27%
K0%

Standard shadow:
Medium tone

C1%
M41%
Y37%
K0%

Dark shadow:
Dark tone



To color the clothing, use large shadows to portray how the fabric falls.



Light

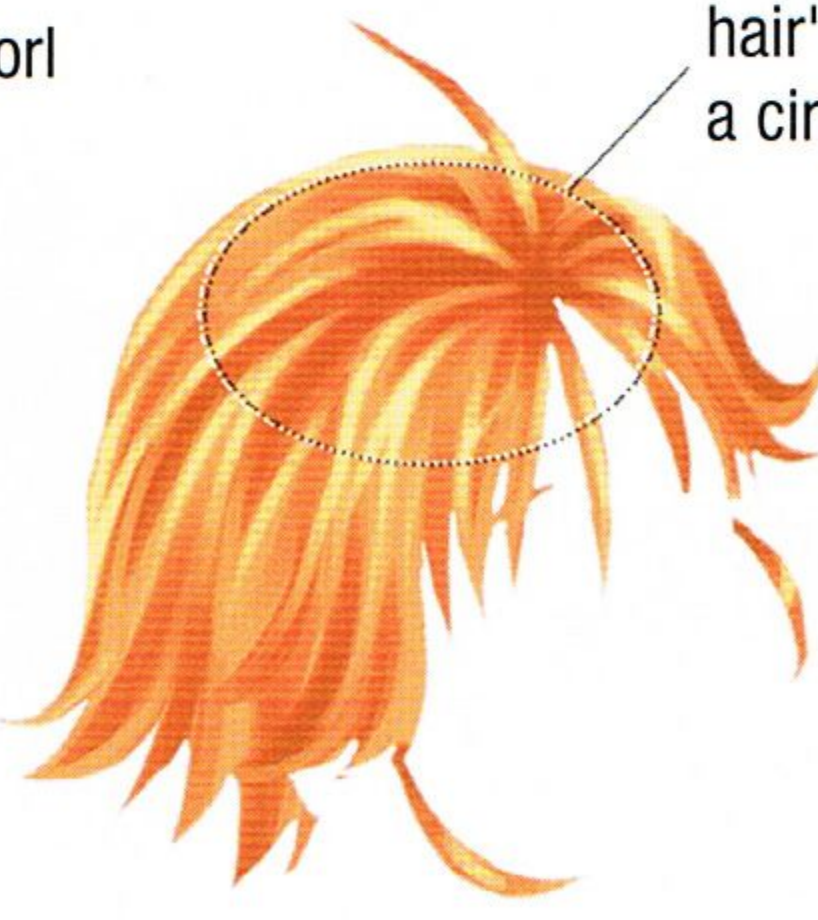
Dark

Capture the bulges of the individual pleats as triangles, repeatedly alternating light and dark.

Coloring the Hair



Hair whorl



Visualize the hair's highlight as a circle.



Color the hair in a radiating pattern with the hair whorl at the center, shaping the hair into locks and bunches.

Add shine to individual locks of hair, by applying a stroke of light color over dark. This will generate a sense of three-dimensionality.

To finish, create the circular highlight by adding a white ring.



Final image

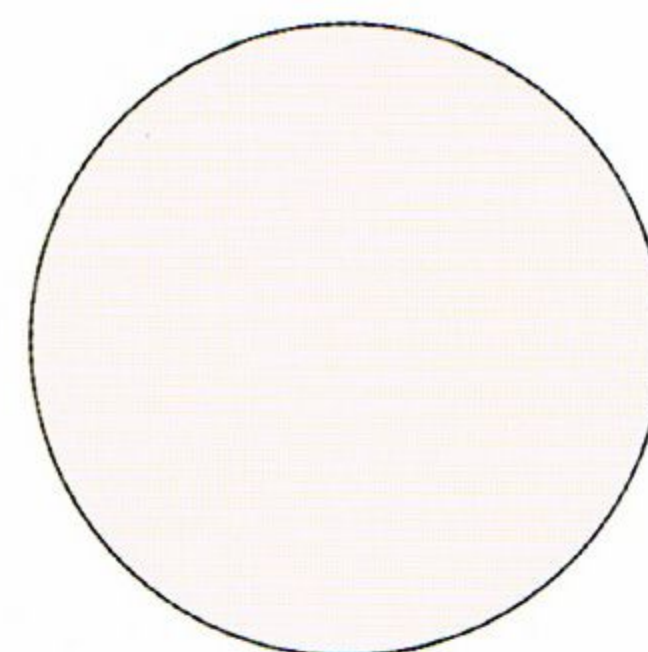
Finishing Touches: Lightening Borders The Effects of Balancing Light and Dark



The above is not quite complete. Lightening a few contours to enhance the visual variation of light and dark is all that is needed to finish the composition.

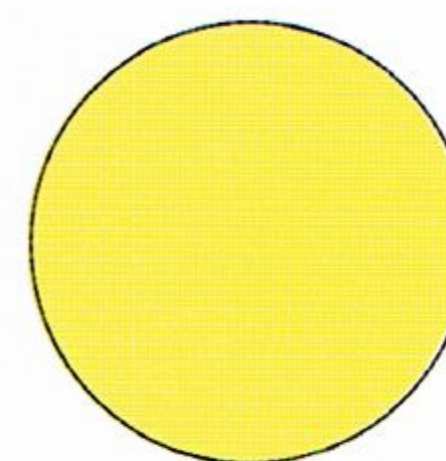


Figure designating areas where light contours will be added



C1%
M1%
Y16%
K0%

Forms' contours are traced using an extremely light tint of yellow (approx. 16%). As pictured in the color plate, the result is a deep red.



Ref. Fig.: 100% Yellow
A saturation of 16% yellow refers to the hue saturation. In this case the tint used is one-sixth of the original, fully saturated hue.



Before adding the light contour



After tracing the contours with 16% yellow



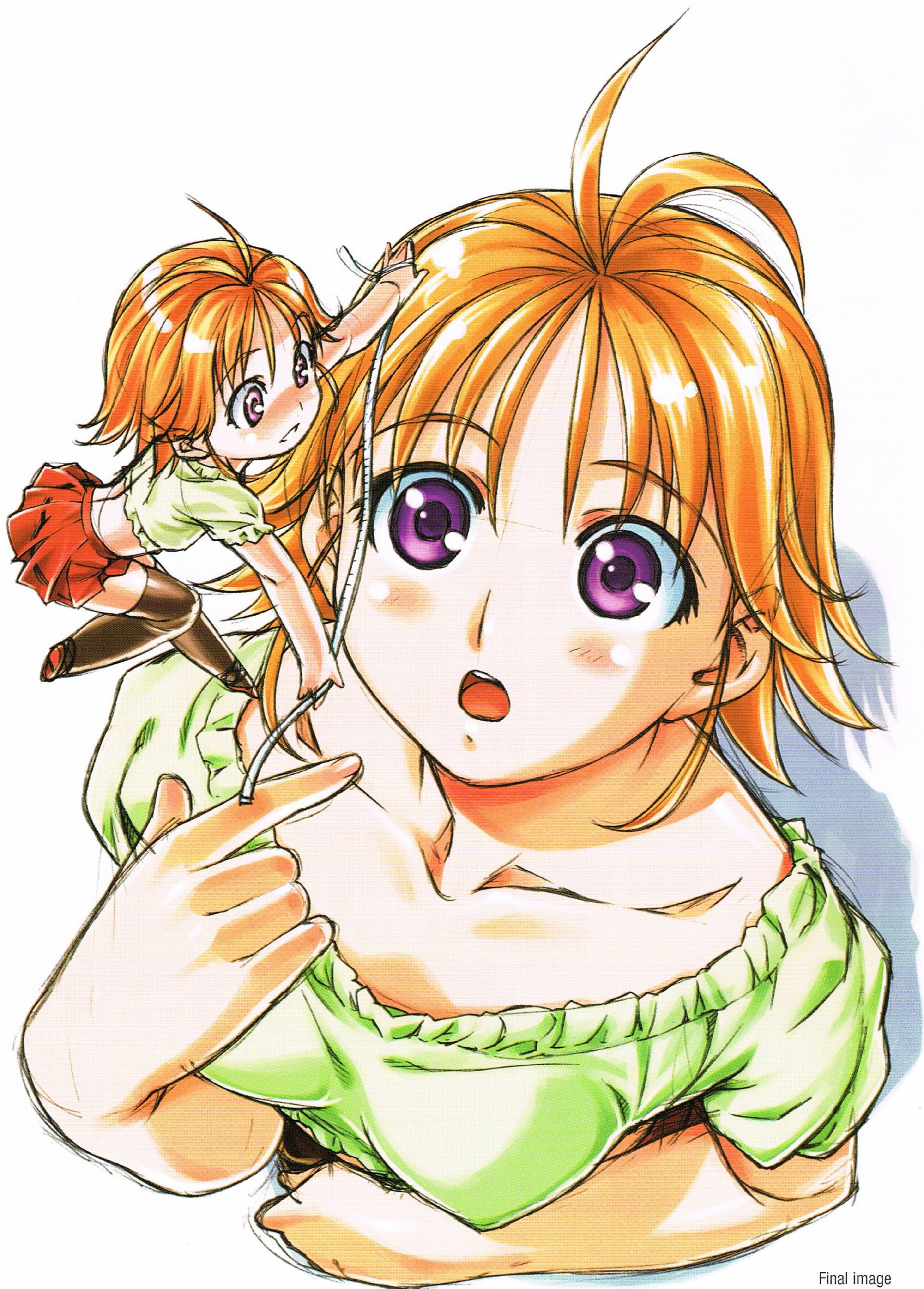
Light contours were also added to the skirt and stockings to make them stand out more clearly.



The region behind the character's head lacks light tones, so light contours were also added to the ends of her hair tufts.



Last, highlights are added to the hair in the back of the head and to the cheeks to finish.



Final image

Putting Colored Pencils to Practice

Artwork by Hiroko Shioda

Using the all-familiar colored pencils to color your artwork is the first step toward creating a line proof or mockup. This section covers the basic steps in coloring.

Color the skin and other areas for which you have already determined the color. Establish the light source's location and (to the girl's upper left in this case) and add shadows underneath the nose, on the sides of the cheeks, and other areas as you color the composition.

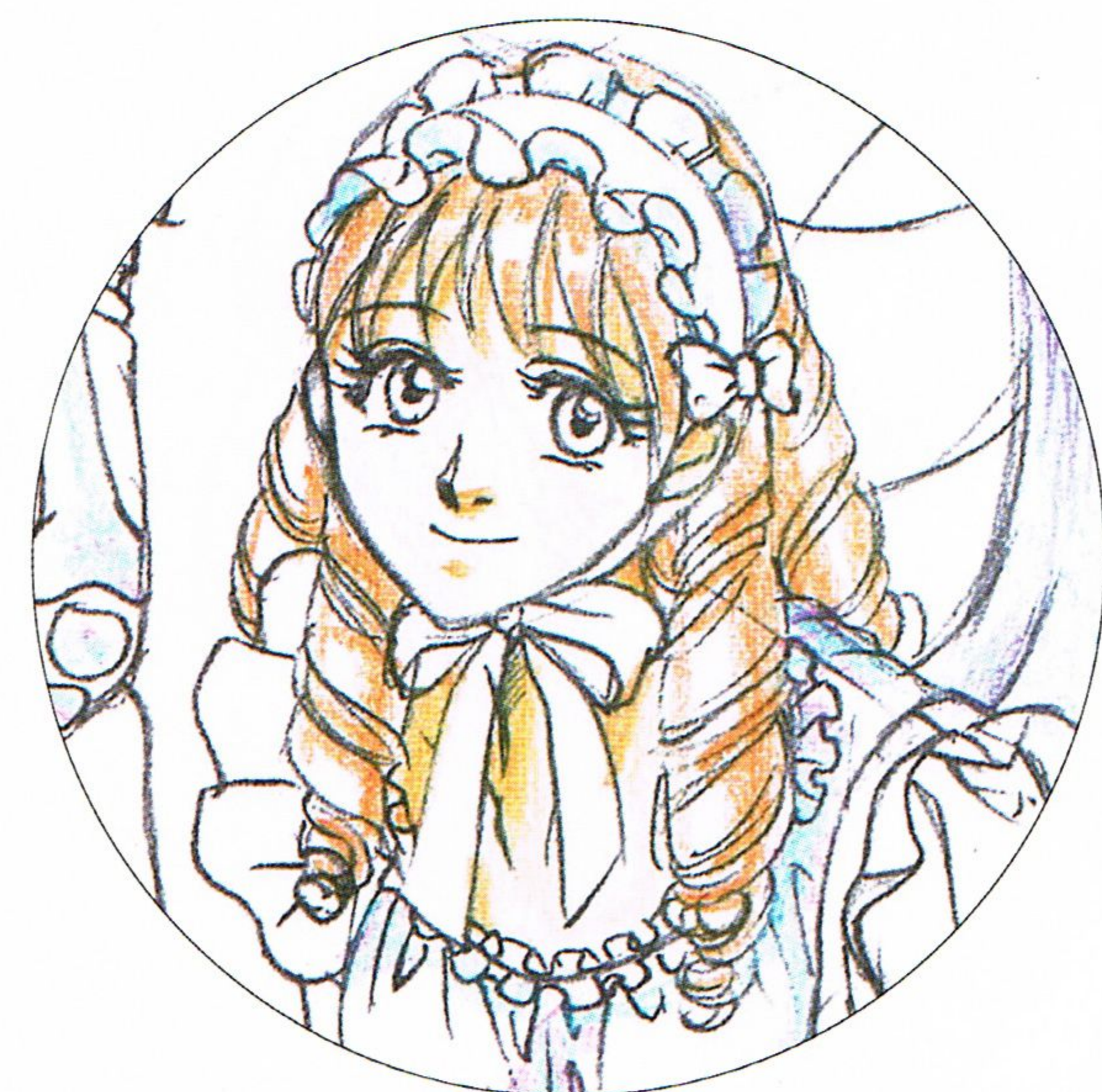
1. Coloring the Skin and White Shadows



For this composition, Shioda uses a slightly darker tone for areas of skin covered by shadow.

Shioda has colored the white corset cover to indicate shadows on the undergarment. Typically greys, and light blues or even light tints of other hues located around the character's clothing or body are often used to apply shadows to white surfaces.

2. Applying Light Colors

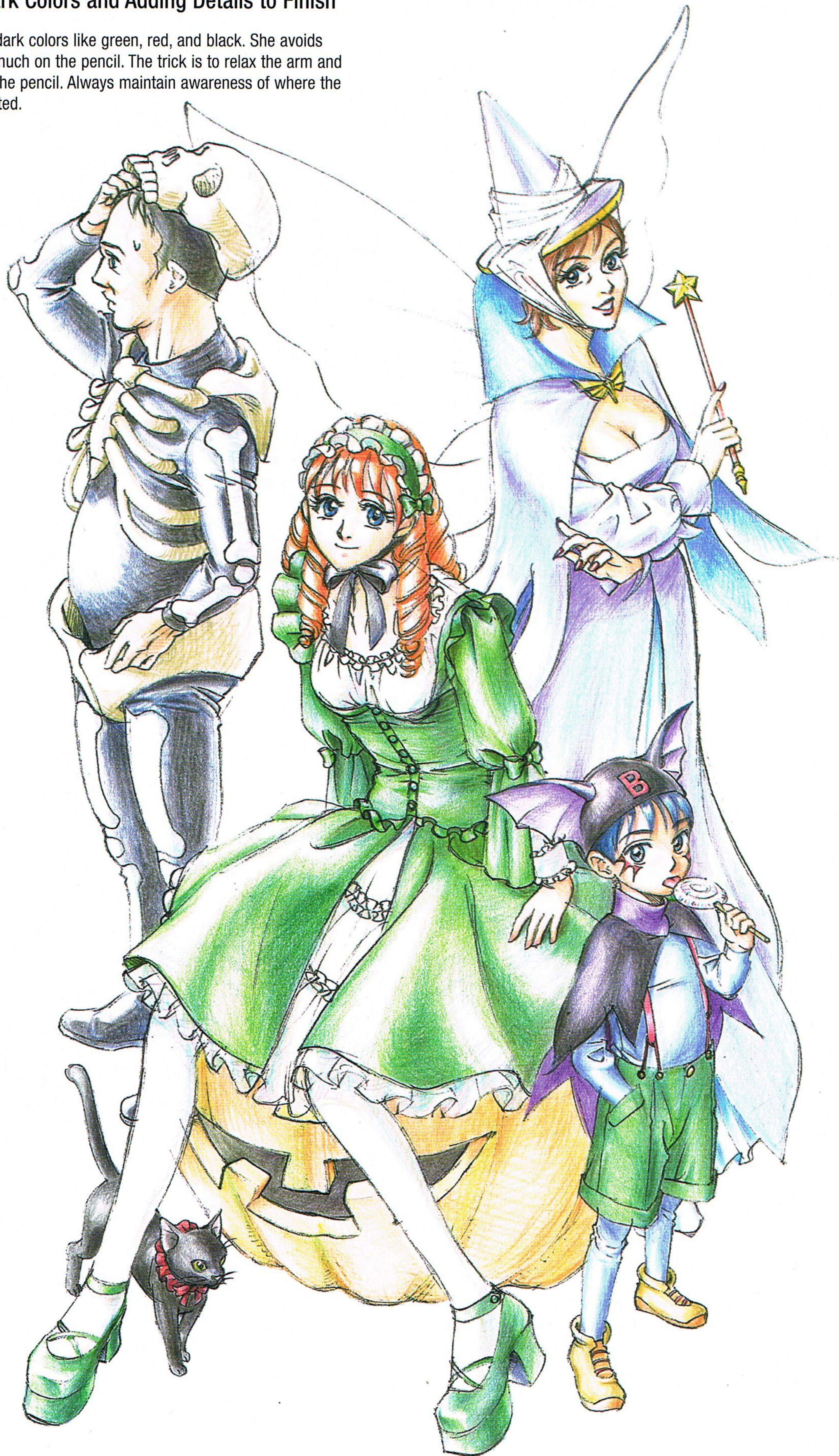


Next, Shioda adds light or soft colors such as yellow, brown or tan, light blue, lilac or pale purple, etc. Green, red, and black are strong colors. She gently applies soft or light colors. To portray shadows, Shioda adds extra layers of color, gradually building up and darkening the shade.

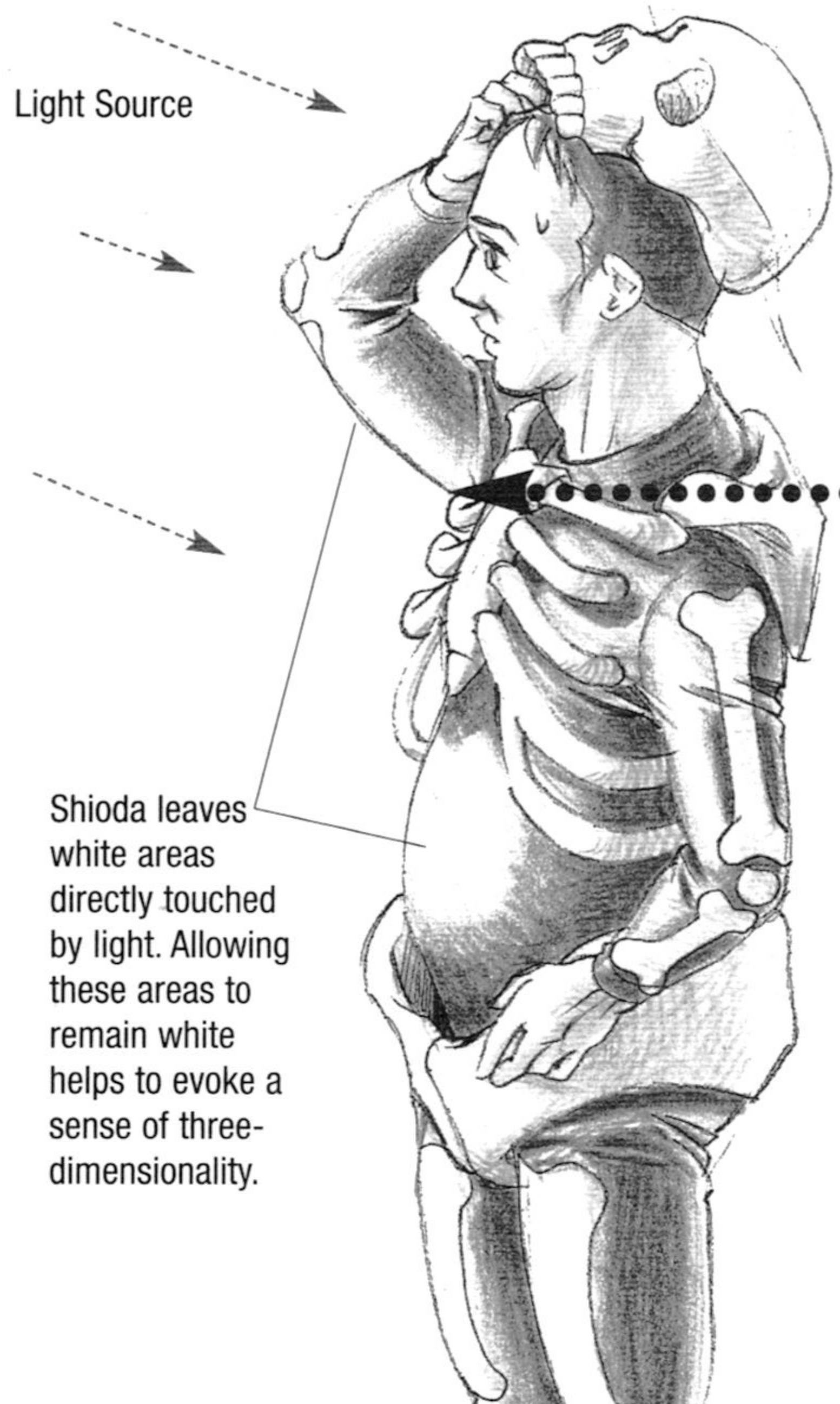


3. Applying Dark Colors and Adding Details to Finish

Last, Shioda adds dark colors like green, red, and black. She avoids bearing down too much on the pencil. The trick is to relax the arm and gently color using the pencil. Always maintain awareness of where the light source is located.



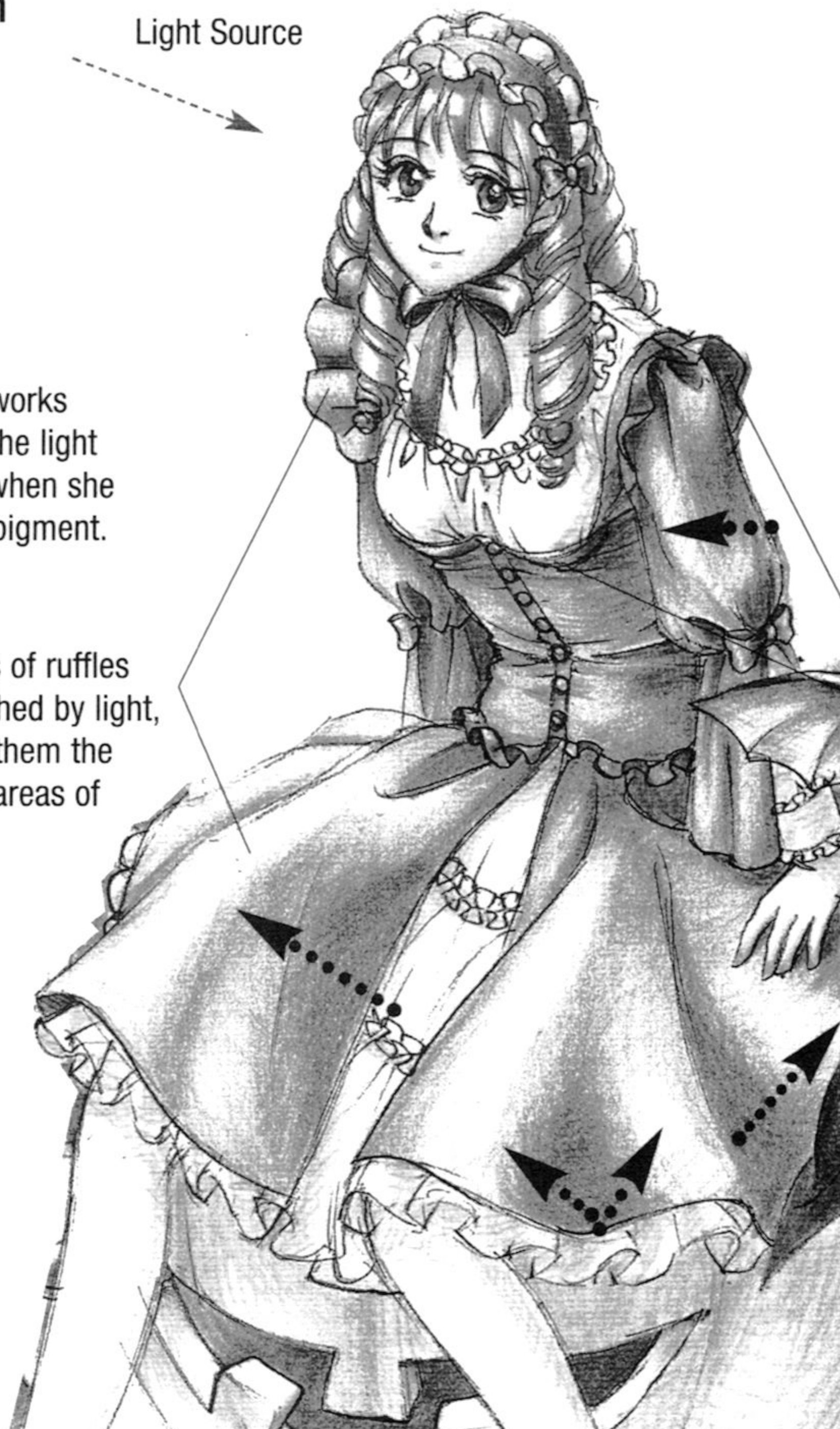
Tricks to Applying Color: Coloring Areas Away from the Light Source First



Shioda leaves white areas directly touched by light. Allowing these areas to remain white helps to evoke a sense of three-dimensionality.

Shioda works toward the light source when she applies pigment.

The tops of ruffles are touched by light, making them the lightest areas of fabric.



The areas underneath the chest and shoulder ruffles are blocked from light, forming dark shadows.

Shioda colors the costume starting with dark areas and moving toward the light tops of fabric ripples.

Light Source

Light Source



Shioda colors the area of shadow underneath, adhering to the arm's contour while imagining that the arm forms a boundary for the shadow.

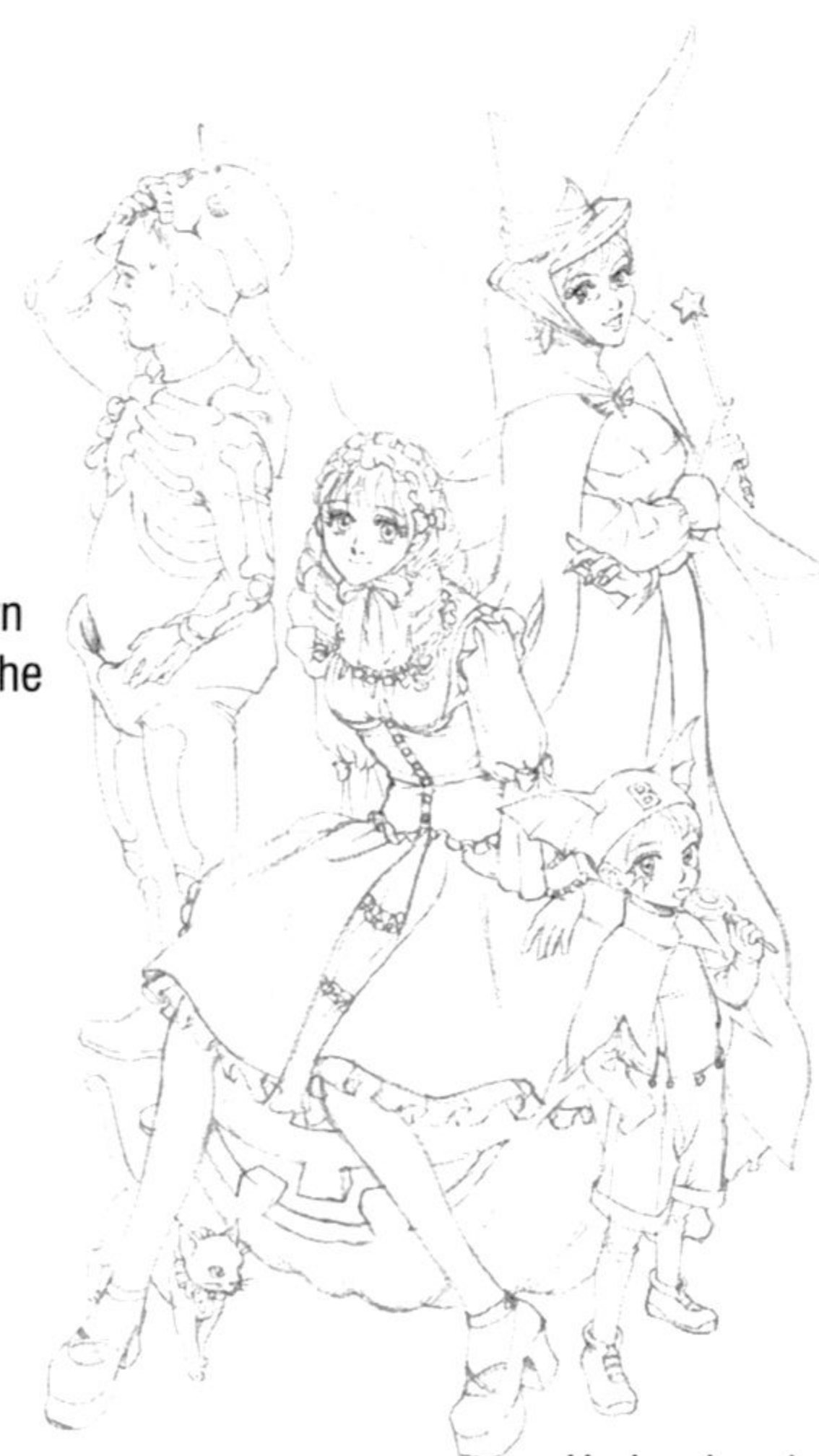
Start with the base of the collar and work outwards.



When coloring your own artwork, work toward the light source.



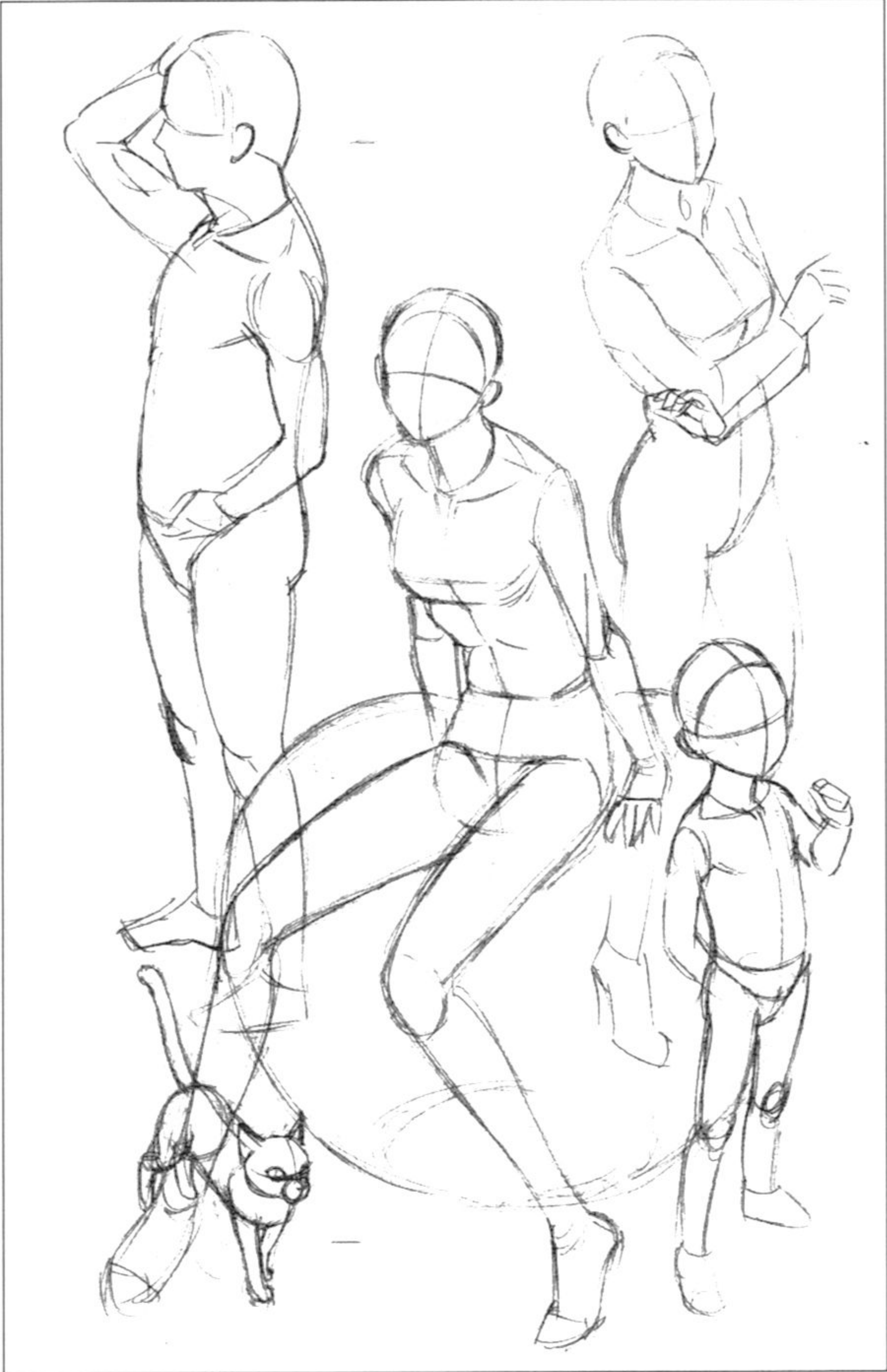
The same applies to coloring animals.



Under drawing

Base Sketching in Anticipation of Adding Color

Figure sketching constitutes a vital element of using color to portray three-dimensionality. Take extra effort to structure all figures carefully.

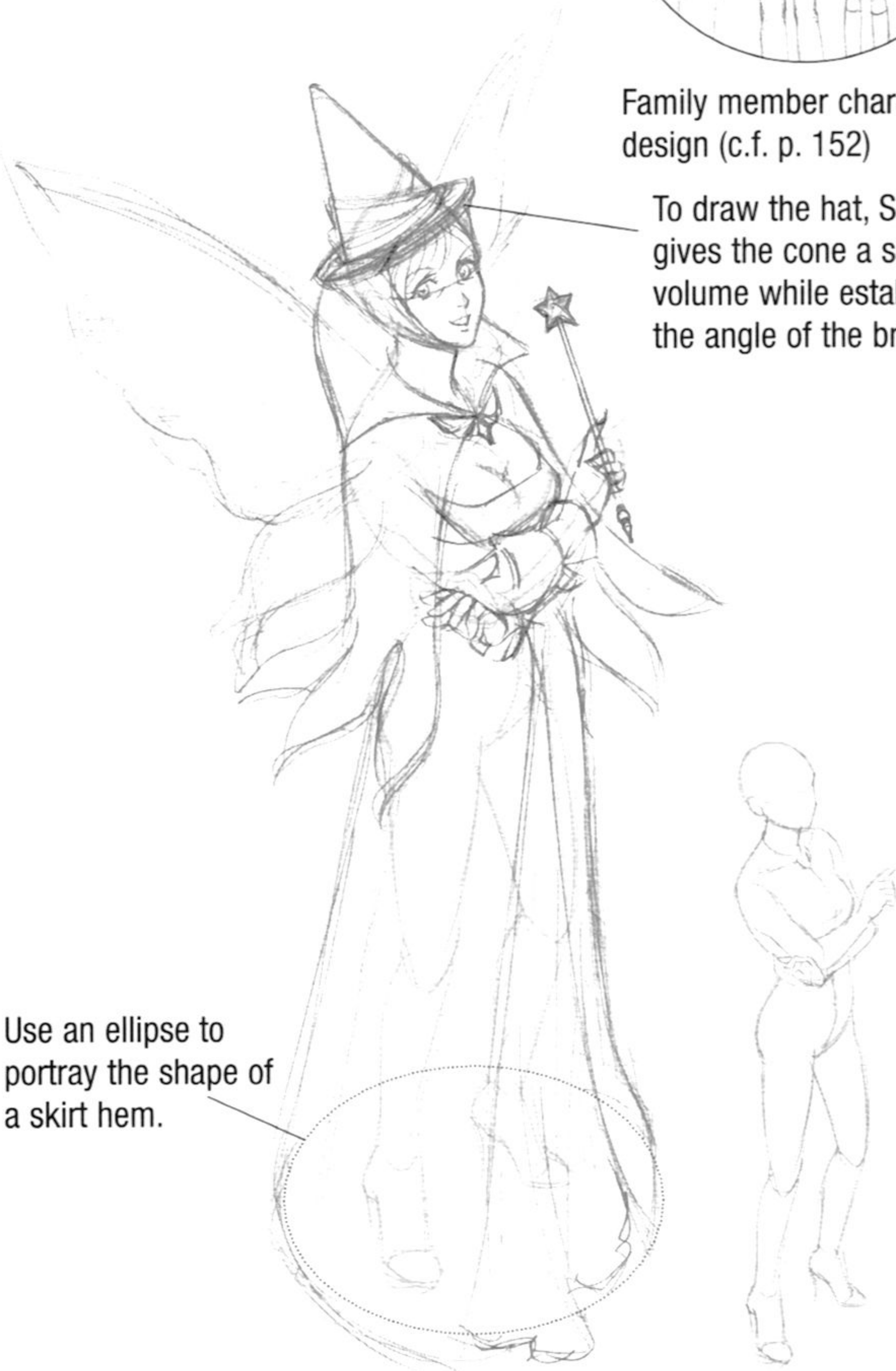


Composition layout: This is produced at the same time the characters are sketched as nudes.



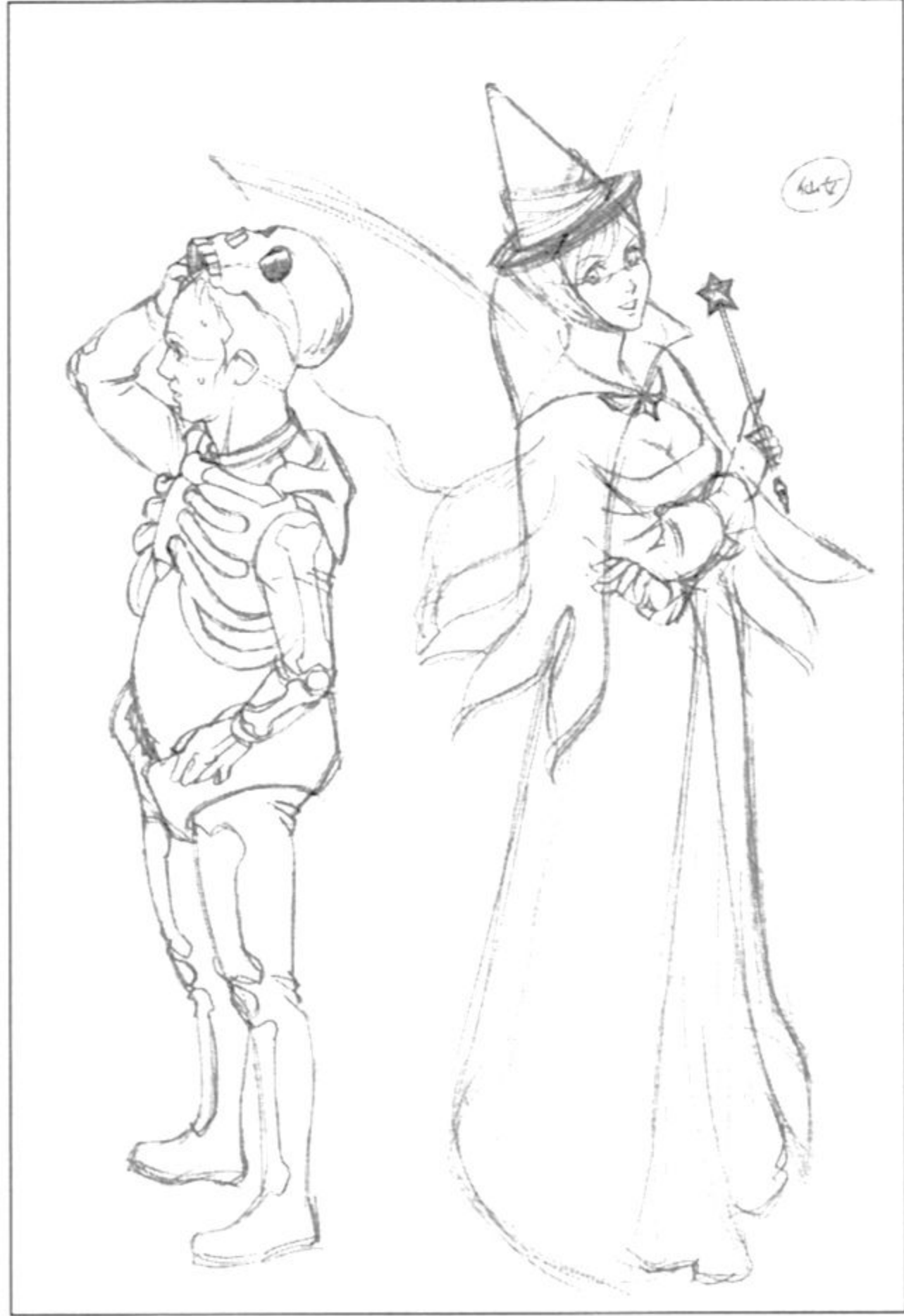
Family member character design (c.f. p. 152)

To draw the hat, Shioda gives the cone a sense of volume while establishing the angle of the brim.



Use an ellipse to portray the shape of a skirt hem.

Costume Design



Long skirts and gowns make it difficult to achieve the correct proportions in the length and silhouette, so Shioda makes a careful nude sketch of the fairy godmother before dressing her.



Shioda used separate sheets of paper to design the cat's collar and pumpkin.

Transparent line drawing showing the nude figures, costumes, and primary props (e.g. the pumpkin)

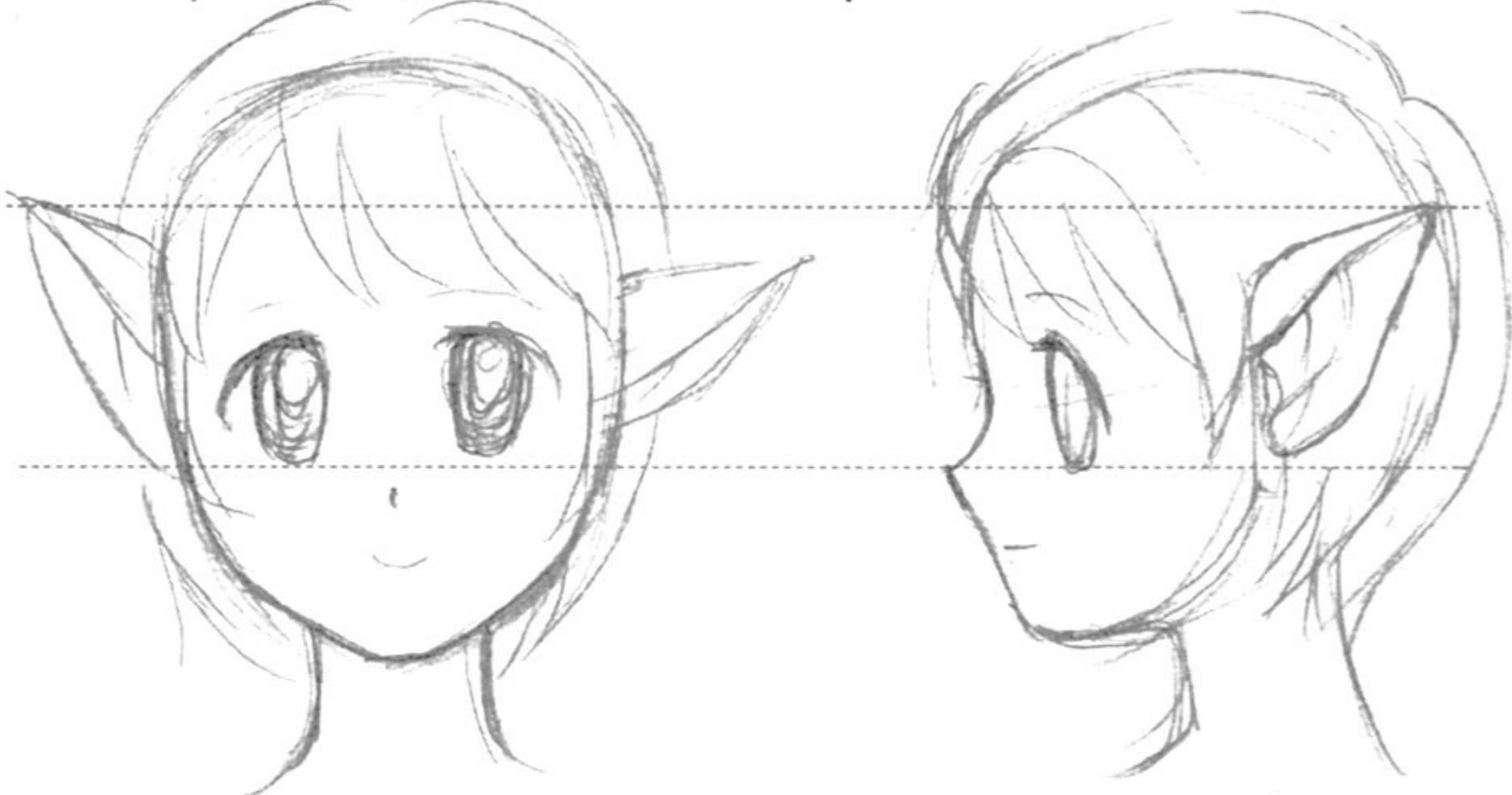


Sample Novelty Roles: Creature Girls

Use proportional and *manga* sketching to design or portray not only adorable human characters, but other characters as well.



The above shows characters with ears attached to the top of the head. Ensure that the tips and bases of the ears are located in the same positions in both the front and profile views.



Ears attached to the side of the head are positioned about the same level as human ears.



Draw an ellipse to mark the layout of where the ear attaches to the head. This will give the ear a sense of volume.



The ears' movements affect how the viewer perceives the characters emotional state or mood, and the ears not only make the character visually interesting but also expand the range of emotional portrayal available to you, the artist.

Steps to Drawing



As when drawing a normal human, start with a circle-and-X layout to draw the head.



This layout of the hair represents its silhouette or outline.

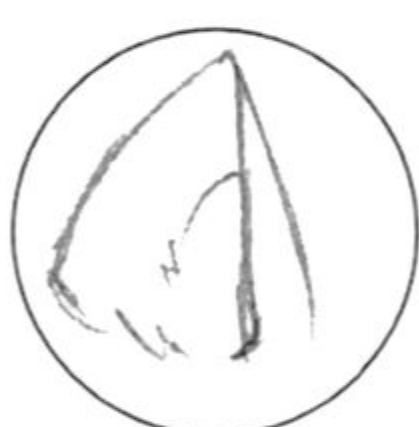
Sketch layouts for the eyes, ears, and hair.



Final image

Assorted Ears

Try to use a wide range of animal ears from dogs and cats to more exotic animals.



Triangular ears:
Dogs, cats, foxes



Pointed ears:
Deer, giraffes, boars, etc.



Floppy ears:
Dogs, elephants



Round ears:
Bears, lions, etc.



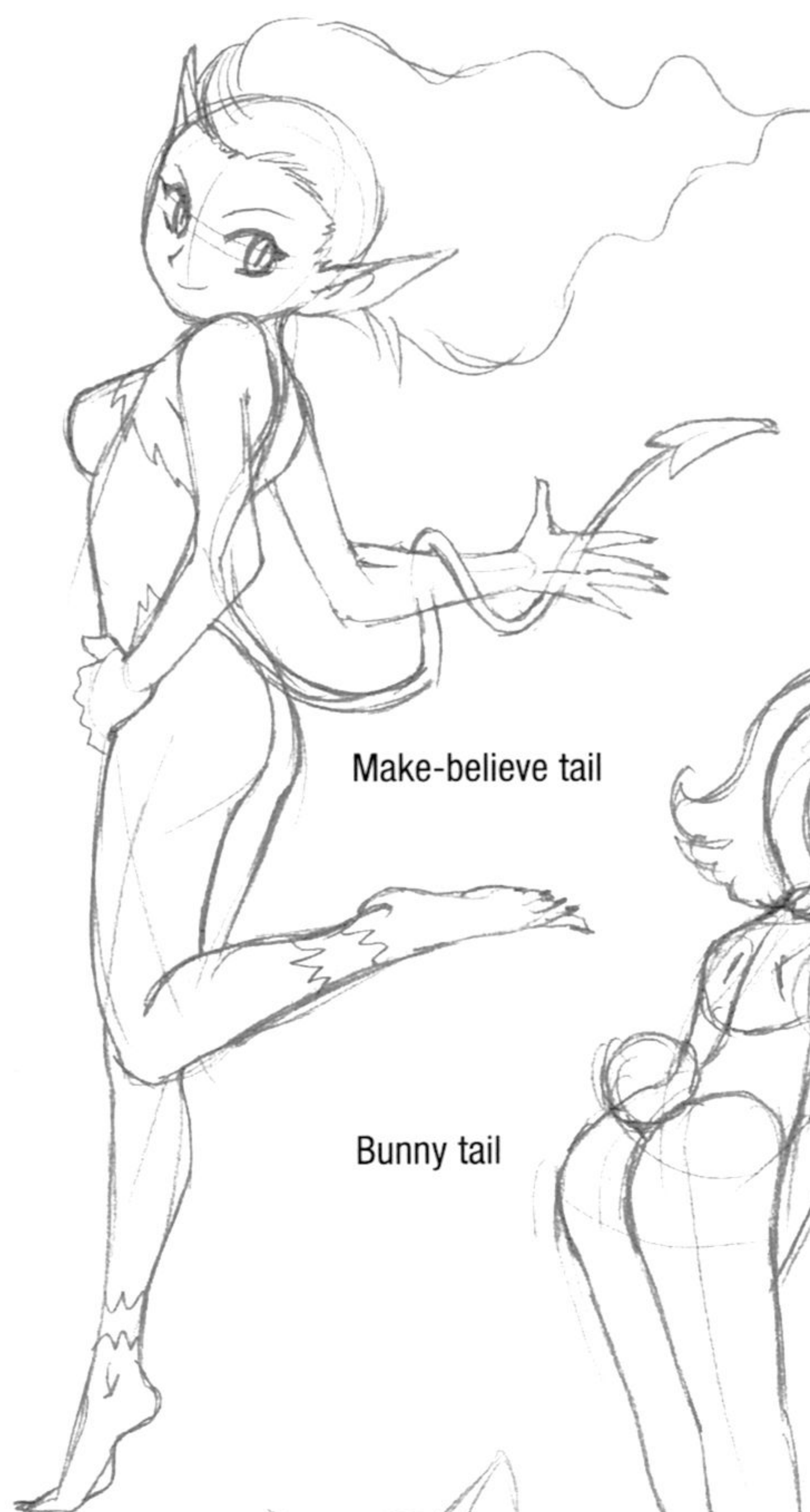
Tall ears:
Rabbits

Characters with Tails

Seated cat (Rear view)



The tail attaches at the coccyx (tailbone).



Make-believe tail

Bunny tail



When designing a *chibi* creature girl, make her limbs smaller and rounder while enlarging the ears and tail, since these constitute the character's distinguishing features.



1:2.5 head-to-body ratio